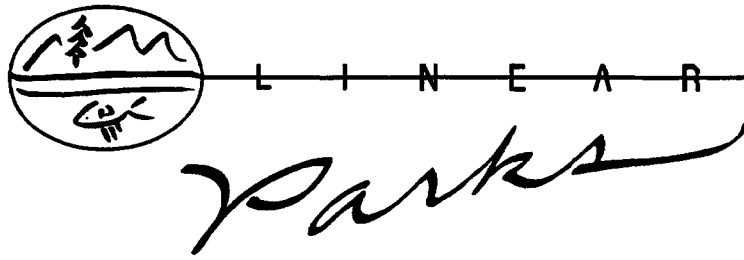
A BLUE RIDGE HERITAGE CORRIDOR

Celebrating Our Past, Creating Our Future

Proceedings of the Seventh Biennial
Linear Parks Conference
1997

Proceedings of the

SEVENTH BIENNIAL



CONFERENCE

September 11-13, 1997
Lake Junaluska Assembly, NC

"A Blue Ridge Heritage Corridor: Celebrating Our Past, Creating Our Future"

Appalachian Consortium Press
Boone, North Carolina 28608

The Appalachian Consortium was a non-profit educational organization composed of institutions and agencies located in Southern Appalachia. From 1973 to 2004, its members published pioneering works in Appalachian studies documenting the history and cultural heritage of the region. The Appalachian Consortium Press was the first publisher devoted solely to the region and many of the works it published remain seminal in the field to this day.

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www.collections.library.appstate.edu/appconsortiumbooks

ISBN (pbk.: alk. Paper): 978-1-4696-4246-8
ISBN (ebook): 978-1-4696-4247-5

Distributed by the University of North Carolina Press
www.uncpress.org

Contents

Heritage Training: Partnerships for the Future of Heritage Tourism in Southwestern Pennsylvania
Kathleen L. Kadlec 4

Preserving the Orchard at Altapass
Bill Carson 12

Preserving the Past and Protecting the Future: Planning in a Blue Ridge Parkway Community
Bill Carson and Judith Francis 15

The Botanical Gardens at Asheville – A Depository for Native Plants of the Southern Appalachian Mountain Region
Edward J.P. Hauser 21

The Dedication of the Great Smoky Mountains National Park by President Franklin D. Roosevelt
Philip A. Grant., Jr. 28

Appalachian's Heritage: The Evolution of the W.L. Eury Appalachian Collection, Appalachian Studies, and the Preservation of Regional Culture and History
Fred J. Hay 31

South Carolina National Heritage Corridor
Curt Cottle 37

A Blue Ridge Heritage Corridor: Celebrating Our Past, Creating Our Future
Lee R. Skabelund and Lon Williams 42

Blue Ridge Parkway: Slicing Through America's Heritage
Peter Givens 61

Waves of Grain - Waves of Change: Silos & Smokestacks–Interpreting our Agricultural Heritage
Daniel L. McDonald 67

The Blue Ridge Parkway Corridor Protection Project: A Status Report
Charles E. Roe 69

Transfrontier Conservation Areas (TFCAS) - Creating Opportunities for Cooperation
Jay Singh 72

"Wanted: Large Lots with Views" - Conservation of Blue Ridge Parkway in Watauga County
Donna Warmuth 77

Heritage Training: Partnerships for the Future of Heritage Tourism in Southwestern Pennsylvania

By Kathleen L. Kadlec, West Virginia University, Morgantown, WV

HISTORICAL BACKGROUND

The importance of heritage tourism, now the number two industry in Pennsylvania, is a microcosmic example of the burgeoning trend of heritage tourism on a national scale. According to a 1994 publication by the American Association of State and Local History entitled "*Heritage Tourism: Partnerships and Possibilities*," tourism is slated to be the number one industry by the year 2000, and is already the number one export of the United States.[1] The Travel Industry Association of America recently reported that more than sixty-five million Americans visited a cultural or historical site last year.[2] The movement is so pervasive that President Clinton announced the advent of the American Heritage Rivers Initiative in his last state of the union address and pledged to designate "ten American Heritage Rivers to help communities alongside them revitalize their waterfronts and clean up pollution." in the 1997 fiscal year.[3]

Even outside the heritage field, heritage tourism is being recognized as an important facet of contemporary culture and economics. A September, 1996, article in American Demographics perhaps summed it up best with an article entitled "Heritage Tourism is Hot."[4] Scholarly works on the importance of heritage tourism planning have begun to appear, and a new facet of tourism, ecotourism, is growing in popularity as heritage practitioners express concern about the adverse effects of tourism on the environment.

As a key component of heritage tourism, heritage parks and heritage areas serve as a means of promoting tourism while also seeking to restore economic stability in an evolving consumer economy. Also essential to understanding the function of a heritage park is its viability as an alternative to placing more burden, fiscal and logistical, on the Federal government by incorporating more parks into the already resource-challenged National Park System.[5]

As one can see by the accompanying map, the Pennsylvania Department of Conservation and Natural Resources(PDCNR) currently oversees eight state heritage parks and there are three areas currently under study. Established heritage parks include the Oil Heritage Region in Venango County, the Rivers of Steel Heritage Area in the Upper Ohio River Valley, the National Road Heritage Park along U.S. Highway 40, the Allegheny Ridge State Heritage Park in Cambria and Blair Counties, the Lincoln Highway Heritage Corridor along a five county area of Southwestern Pennsylvania, Lackawanna Heritage Valley in Lackawanna County, Delaware and Lehigh Canal Heritage Corridor along the Delaware River, and the Schuylkill Heritage Corridor in four counties along the Lehigh Valley.

In addition to these already established heritage parks/areas, there are three areas under consideration by the PCDNR; the Lumber Heritage Region in north-central Pennsylvania and the Endless Mountains Heritage Region in Northeastern Pennsylvania, respectively.

The third area under consideration is a portion of Armstrong county along the Allegheny River for incorporation into the Rivers of Steel Heritage Area.[6]

Established after 1990, this heritage park network is comparable to other heritage areas in other states, most notably New York and Massachusetts. These states, as well as many others, have discovered the symbiotic relationship between sustainable heritage development and preservation of natural and cultural resources. Without public interest and revenue, in addition to federal funding, heritage parks could not have enjoyed this phenomenal growth. The Pennsylvania State Heritage Parks reflect this reliance on partnerships. According to the PDCNR's "Pennsylvania Heritage Parks Program Manual," a Pennsylvania Heritage Park is "all about partnerships. The foundation upon which the program is structured involves the building and strengthening of regional coalitions of community leaders, non-profit interest groups, the private sector, state agencies, and the federal government."[7] This concept of partnerships is evident in the designation process of heritage parks in Pennsylvania. Each heritage park is required to incorporate a local heritage park task force to provide input and guidance in the preparation of the feasibility study project application. This group, composed primarily of citizen groups and individuals, accepts the feasibility study and the area becomes a park planning area until a management action plan is completed. After the plan is accepted by the Pennsylvania Department of Conservation and Natural Resources, the region is designated as a state heritage park. The local heritage park task force then remains an integral contributor in the process of implementation of the heritage park's management plan.[8]

Since 1990, the Pennsylvania State Heritage Parks that were established through this process have become an interconnected system of sustainable heritage tourism that serves many viable functions, most notably promotion of economic development, education and interpretation, conservation of cultural and natural resources, the facilitation of partnerships among heritage organizations, and the strengthening of collective regional identity among inhabitants of the residents of the heritage area. The latter of these functions is also a prerequisite to the success of any heritage area or park. Without grassroots interest of the community whose heritage is being preserved, the viability of the heritage park is precarious. Furthermore, without community involvement, the efforts at economic sustainability are futile as well. With these three functions in mind, the following case study is the result of one public historian's attempt to establish a heritage training model that would increase the degree of partnerships among organizations with a stake in heritage tourism.

HERITAGE TRAINING FOR THE ALLEGHENY HERITAGE DEVELOPMENT CORPORATION

The research for this case study was funded by the Allegheny Heritage Development Corporation(AHDC), a nonprofit organization that operates in a nine county area in southwestern Pennsylvania. The progenitor of the AHDC is the Southwestern Pennsylvania Heritage Preservation Commission(SPHPC), created by Congress in 1988 to build upon the documenting of heritage sites by the America's Industrial Heritage Project. The SPHPC relies on a regional planning approach to the preservation of cultural and natural resources in the nine county region. The original char-

ter of the SPHPC expires in 1998 and the AHDC, a non-profit heritage development organization, is slated to take its place.[9]

The SPHPC/AHDC has been active in Pennsylvania's heritage parks from their inception. One of the two state heritage parks in AHDC's region, The Allegheny Ridge State Heritage Park, was created in 1990 with assistance from the SPHPC. Currently, the AHDC is providing one state heritage park, Lackawanna Heritage Valley, with assistance with its heritage passport system and has incorporated the Allegheny Ridge State Heritage Park into its heritage passport initiative.

The case study involved originated from the need, as perceived by the AHDC, that more extensive "heritage training" was needed in order to achieve more grassroots support and also to provide communities with leadership and jobs that will expand the heritage community's base. While this comprehensive objective may seem esoteric, the principal rational was to explore ways that the AHDC could both educate people about the heritage of the region and to provide a foundation for sustainable economic development. For matters of convenience, "heritage training" was defined as "any means by which a heritage agency engages in a dialogue with the constituency that it serves and promotes increased awareness of a collective heritage."

The actual course of action was undertaken in three phases. The first phase was the performance of a unstructured inquiry of other heritage areas to obtain insight as to prospective methods that the AHDC could apply to its own heritage infrastructure. The second phase consisted of the implementation of current heritage training projects under development by the AHDC. The third phase was a more formal survey of potential partners in the region as to what they feel their "heritage training" needs were and how the AHDC might assist them in meeting these needs.

In the first phase of research, the types of heritage training that were in use by various heritage parks nationwide were documented. There was no basis of selection to this process, it served as an introduction to the researcher regarding the latest initiatives of the larger and better established heritage areas. Predominant among these heritage initiatives were leadership training, hospitality training, conferences, technical assistance programs, and volunteer coordination services. Various workshops, mainly in aspects of historic preservation, site management, and archives and records management, were also popular. Other innovative programs consisted of local history days, festivals, and an especially innovative resident awareness program, sponsored by the Hudson River Valley Greenway Communities Council entitled *"Company's Coming."* This program is designed to strengthen businesses with technical assistance while encouraging them to be more cognizant of local history. Familiarization tours, whereby residents role-played as tourists and toured historic sites in the region are an integral component of the program.

Phase two of the research was to continue to follow up on some projects currently under development by the AHDC. One of these projects was to incorporate a heritage awareness program into a local convenience store chain's employee training. The rational behind this program was that since this chain of convenience stores serves as the entrepot for tourists, the more that employees knew about the heritage area, they more they could direct tourists to

these heritage sites. Optimally, the convenience store employee would serve as a "heritage ambassador," and both the heritage area and the convenience store would benefit since the tourist would spend more time in the region and patronize local businesses. Due to fiscal constraints, as well as the logistical problems of the convenience store chain, this method was not applicable from a systems viewpoint. It was communicated to the AHDC that each individual store manager did possess a degree of autonomy and could be approached to incorporate some type of heritage ambassador component to their training or day-to-day operations. This program is currently under investigation by the AHDC.

Another important component of heritage training implementation was to network with various academic institutions to encourage integration of heritage training into their academic curriculum. There are several community colleges and universities in the nine county region that the AHDC serves, as well as their respective satellite campuses. The most obvious avenue in regard to curriculum expansion is through either hospitality management or parks and recreation programs because the AHDC, with its extensive contacts and experience in the heritage tourism industry can provide assistance with curriculum development, internship opportunities, and job placement. One community college with satellite campuses in the region has recently incorporated a travel and tourism certificate into their hospitality management program. During the research period, contacts were made with two community colleges and one university. It was found that research needed to be conducted in conjunction with these schools to ascertain the marketabitlity of a certificate or additional training in heritage tourism management or heritage hospitality. Also at the university level, effort was made to incorporate a history of place field school into a landscape architecture program. This "History in Place" field school was developed to provide landscape architecture students with some historical research skills, such as researching census records and using Sanborn insurance maps, to assist these students with incorporating a sense of place and historical context into their design projects. The establishment of this "History of Place" field school is also currently under development.

In regard to heritage training for the general public in phase two, there were two initiatives under development by the AHDC. The first was a Section 106 Review Seminar for municipalities that was sponsored by a local housing rehabilitation organization, Partners in Neighborhood Revitalization, Inc., and AHDC. These two entities developed the seminar for local government officials and planning departments that administer federal funds for historic rehabilitation. In order to receive these federal funds for historic rehabilitation, municipalities must submit construction proposals to the state historic preservation office that meet the United States Secretary of the Interior's Standards for Historic Rehabilitation. The seminar is designed to familiarize these municipalities with the standards in order to facilitate the dispersement of these funds. Also in regard to the built environment, a house history workshop entitled "*Who Slept Here?*" was offered to residents through local public libraries and historical societies. This seminar instructed home owners on how to research the history of their home.

The other public program, a leadership training program, will be initiated

in conjunction with the Pennsylvania State University College of Agricultural Sciences, Cooperative Extension Division. In Huntingdon County, one of the counties in AHDC's region, the *"Building Leaders"* program has been in existence for three years and has made substantial progress in educating residents and local officials about the need for community leadership. The *"Building Leaders"* program is a thirty hour program that focuses on team building and community issues. The program will be expanded to the other counties of the region on a county by county basis. Unlike leadership training as offered by area chambers of commerce, the "Building Leaders" program focuses solely on community leadership. This is the foundation of the heritage partnership, because without local leaders who are cognizant of community needs, sustainable heritage development and economic stability are impossible to achieve.

Phases one and two provide viable examples of the implementation of heritage training and also demonstrate the comprehensive nature of heritage training. In phase three a more coherent methodology was employed in order to more accurately gauge the demand of the heritage training market. The AHDC also desired to avert duplication of programs already in operation by other agencies and wanted to explore the creation of more partnerships with heritage institutions inside the region. It was decided that a survey would be performed to ascertain the needed information.

Survey development and implementation were undertaken in conjunction with AHDC's Marketing Department. Based on the comprehensive nature of the organizations under the AHDC umbrella, two surveys were developed. The first survey assessed the customer service training needs of the following agencies: county heritage committees, tourist promotion agencies, chambers of commerce, main street programs, county planning commissions, and state heritage parks. The term "customer service training" instead of "heritage training" was used because the AHDC believed that the terminology of "heritage training" was too ambiguous and could be easily misconstrued. The objectives of the AHDC were to calculate both the extent of training currently provided by organizations and the willingness of these organizations to partner with the AHDC in implementation of additional customer service training. The survey in Appendix A was sent to these sixty-eight organizations.

The response rate for the first survey was forty-one percent. Besides providing demographic data on each agency, it was found that seventy percent of respondents did not have strategic plan that encompassed customer service training, while thirty-seven percent of respondents had observed the need for customer service training. The same number of respondents that recognized the need for customer service training had also been asked to provide the training. Eighty percent of respondents reported that their members desired hospitality training, while fifty percent wanted leadership training. Twenty percent desired a conference/symposium. Of the respondents that had been approached to offer customer service training, only one respondent had not implemented training. Eighty-nine percent of the respondents that offer customer service training offer hospitality training, while forty-four percent offering leadership training. It was not uncommon for respondents to offer more than one type of training and a broad spectrum of the public were targeted for the training.

Of the respondents who had not implemented any training, forty-eight

percent were planning to in the near future. When asked to report on a scale of one to five as to how important customer service training was to their employees, with five being the highest, it was found that eighty percent rated customer service training above four on the scale. Furthermore, eighty-seven percent of respondents reported that they would assist an external group in implementing customer service training for their employees.

In conclusion, many respondents have implemented customer service training, and those that have not are generally willing to assist another organization with implementation. This overwhelming desire on the part of the agencies to partner with an agency presented a unique niche for the AHDC to fill in regard to heritage training. By incorporating a heritage component to new hospitality training programs, the AHDC can foster a sense of collective identity and an appreciation of heritage within these organizations. In addition, since the majority of the respondents are membership organizations, the AHDC should then encourage more attempts by the respondents at needs assessment of their members in order to obtain a more comprehensive evaluation of the needs of all members. In this manner, as well as with implementation of heritage training, the respondents will serve as a "bridge" between the AHDC and the members that the organizations serve.

While the survey provided pertinent information, there were flaws with the survey as well. The targeted group was so comprehensive that some questions were misinterpreted and the term "heritage" was confusing to many agencies, such as planning departments and chambers of commerce. But for the most part, all of these agencies were cognizant of the need for customer service training, especially hospitality and leadership training, which the AHDC can partner with them in creating a standardized heritage tourism and community development component to any training program.

The second survey targeted a select group of historic sites and overnight accommodation facilities. The objective of this survey was twofold: to ascertain what these businesses/sites were looking for in a customer service employee and to find out how these businesses/sites perceive themselves in regard to other heritage sites. It was also thought that since these businesses/sites were the largest in each respective county, ascertaining their needs would have a trickle-down effect on heritage training, meaning that once these larger sites addressed the issue of heritage/customer training, they could serve as models for other smaller businesses/sites. A copy of the second survey can be found in Appendix B. The survey was sent to thirty heritage sites and businesses. [10]

The response rate of this survey was forty-seven percent. Once again, the AHDC acquired some concrete demographic data regarding number of visitors/units and turnover rates. Once again, this was couched in the terms of customer service training. The sections were broken down much more definitively than the previous survey. One section dealt with customer service training and the other section dealt directly with heritage issues. In regard to customer service training, ninety-three percent of respondents believed that their employees were engaged in customer service and all of the respondents are seeking communications skills in a customer service employee. Other skills such as computer training and educational background were important as well. Eighty-five percent of respondents provide customer service training, pre-

dominantly hospitality training, computer skills, and communication skills. This type of data is integral in establishing partnerships with community colleges and universities that need this market information for program development.

In regard to how important heritage tourism was to the respondents, the data was somewhat contradictory. While only fifty one percent of respondents rated heritage sites above four on a scale of one to five as being important to their visitors, ninety-three percent of respondents refer people to heritage sites. Sixty-six percent of respondents also have either an informal or formal partnership with a heritage site, and eighty-six percent said that they think it makes their business more attractive. From this we gather that heritage sites are important to these businesses/sites despite the conflicting results to the rating response question. Some of the respondents who rated heritage sites as not important to their visitors were large hotels in metropolis areas whose clientele was more business-oriented.

Perhaps most promising in regard to partnership opportunities for the AHDC, fifty percent of respondents are interested in wayfinding seminars for their employees, while fifty-seven percent were interested in local history awareness seminars. Familiarization tours and introductory seminars on the Path of Progress heritage route were also of substantial interest to respondents. In conclusion, the results of the second survey illustrate three main themes among the respondents. Most of these larger heritage businesses/sites provide their own customer service training and are also highly value communication and computer skills. These same entities are aware of the importance of heritage to their business and refer their visitors to other heritage sites, with a substantial degree of collaboration between sites and businesses. The most vital data gleaned from this survey, however, was the desire of these businesses/sites to learn more about heritage attractions. Once again, as with the previous survey, there exists a niche for the AHDC to fill in regard to heritage training that could facilitate a greater degree of collaboration.

CONCLUSION

The next step in heritage training after the accumulation of data, was to incorporate these findings into a "master plan" for heritage training. Based upon observation and survey quantification, heritage training was broken down into three categories: heritage education services, heritage training in the academic context, and heritage training in the community context. Heritage education services consist of services that the AHDC could provide to businesses or other heritage sites. Hospitality training, preservation seminars, technical assistance, public relations, site development, and interpretive training all fall into this category. Heritage training in the academic context refers to the aforementioned expansion of curricula in colleges and universities, through hospitality management and other programs. Heritage training in the community context encompasses those programs designed to engage residents and other organizations in a heritage dialogue. The *"Who Slept Here?"* workshop is a good example of this type of training. Other initiatives include historic rehabilitation seminars for home-owners, Bed and Breakfast workshops, leadership training, and genealogy workshops.

These three facets of heritage training will work together to facilitate sustainable heritage development and increase a sense of collective identity. But

above all, the programs as implemented through this model will expand the community heritage network and encourage dialogue between each of the involved groups and/or individuals. Once accomplished, this enlarged network will have a substantial positive effect on the number and geographical extent of heritage partnerships. These more inclusive partnerships are the present and future lifeblood of all heritage areas. Perhaps a greater understanding of the concept of "heritage," a problematic term for many non-traditional heritage organizations, will evolve as these partnerships continue to expand.

BIBLIOGRAPHY

Brink, Peter. "Informational Pamphlet No. 88," (Washington, D.C.: National Trust for Historic Preservation, 1994): 2.

Clinton, William. "The State of the Union: President Clinton's Address," Congressional Digest 76 (March, 1997): 65-67.

Dickinson, Rachel. "Heritage Tourism is Hot," American Demographics, (September 1996): 13-14.

Hargrove, Cheryl. "Tourism: History's Wake-Up Call," Heritage Tourism, Partnerships and Possibilities, (Nashville: American Association for State and Local History and the National Trust for Historic Preservation, 1994): 1.

Mermel, Marcy. "Heritage, Tourism, and Regional Economic Development: A Plan of Action for the Southwestern Pennsylvania Heritage Preservation Commission ," (Project Paper, Cornell University, 1994).

Pennsylvania Department of Conservation and Natural Resources, "Heritage Parks of Pennsylvania," October 1996. (Prepared by the Bureau of Topographic and Geologic Survey).

Pennsylvania Department of Conservation and Natural Resources, "Pennsylvania Heritage Parks: A Program Manual," (Harrisburg: Pennsylvania Department of Conservation and Natural Resources, 1996): preface.

Pennsylvania Department of Conservation and Natural Resources, "Pennsylvania Heritage Parks: A Program Manual," (Harrisburg: Pennsylvania Department of Conservation and Natural Resources, 1996): 11.

Travel Industry Association of America, "Travel Industry Association Releases Landmark Report on Cultural and Historic Tourism." http://www.nchd.org/nchdweb.nsf/TOC?Openview (7 August 1997).

NOTES

[1]Cheryl M. Hargrove, "Tourism: History's Wake-Up Call," Heritage Tourism, Partnerships and Possibilities, (Nashville: American Association for State and Local History and the National Trust for Historic Preservation, 1994): 1.

[2]Travel Industry Association of America, "Travel Industry Association Releases Landmark Report on Cultural and Historic Tourism." http://www.nchd.org/nchdweb.nsf/TOC?Openview (7 August 1997).

[3]William Clinton, "The State of the Union: President Clinton's Address," Congressional Digest 76 (March, 1997): 65-67.

[4]Rachel Dickinson, "Heritage Tourism is Hot," American Demographics, (September 1996): 13-14.

[5]Peter Brink, "Informational Pamphlet No. 88," (Washington, D.C.: National Trust for Historic Preservation, 1994): 2.

[6]Pennsylvania Department of Conservation and Natural Resources, "Heritage Parks of Pennsylvania," October 1996. (Prepared by the Bureau of Topographic and Geologic Survey).

[7]Pennsylvania Department of Conservation and Natural Resources, "Pennsylvania Heritage Parks: A Program Manual," (Harrisburg: Pennsylvania Department of Conservation and Natural Resources, 1996): preface.

[8]Pennsylvania Department of Conservation and Natural Resources, "Pennsylvania Heritage Parks: A Program Manual," (Harrisburg: Pennsylvania Department of Conservation and Natural Resources, 1996): 11.

[9]Marcy Mermel, "Heritage, Tourism, and Regional Economic Development: A Plan of Action for the Southwestern Pennsylvania Heritage Preservation Commission ," (Project Paper, Cornell University, 1994).

[10]The marketing director for the AHDC, Mr. Jack York, was not able to ascertain which sites were the largest and most visited in some of the counties. Therefore the total number of surveys was thirty, as opposed to eighteen.

Preserving the Orchard at Altapass

Bill Carson, Little Switzerland Community Assoc., Little Switzerland, NC

On Jan 6, 1995 our family started an adventure still unfolding today. With one day's thought and no preparation or experience, we bought an apple orchard. We didn't want an orchard. We did want to preserve and protect a beautiful and important stretch of land.

'We' consist of sister Kit Carson Trubey, wife Judy and me. Let me say right up front we're not 'from here'. As near as I can tell, that requires at least 2 generations and a familiar last name. The name is OK, but our folks are ftom east Tennessee and that's not quite close enough to here: the Blue Ridge of North Carolina.

Even so, we grew up visiting here. An uncle was a mining engineer at Kona in the 40's and 50's. An aunt lived at Little Switzerland in the 60's, 70's and 80's. We grew up loving the beauty of the Blue Ridge, and its beloved Parkway. So it was natural for Judy and me to retire to the Blue Ridge after 3 2 years in business. Kit plans to join us as soon as she can.

The land we chose to preserve lines both sides of the Blue Ridge Parkway for about 2 miles. Situated near McKinney Gap at the top of the Blue Ridge, this land overlooks second growth forest for as far as the eye can see. A few mostly seasonal houses peak through the forests in the distance, enjoying the views of ridges and valleys as they etch the Blue Ridge and echo to the Piedmont 30 miles away.

The solitude is emphasized but not destroyed by CSX freight trains that still negotiate the loops and tunnels on tracks built I 00 years ago to bring the coal and minerals out of the mountains in the west. When completed in September 1908, the Chesapeake Loops were called the engineering wonder of the 20th century. More than 200, mostly the immigrant workers, died in fights, murders and accidents building this track, and many are buried forgotten along the tracks and in two railroad graveyards on the orchard. Their stories add to the heritage of the orchard. Their employer, tunnels completed, started the orchard in the first decade of this century.

Even today only two railroads cross the Blue Ridge in 400 miles from Roanoke to Atlanta. The railroad chose this place to cross for the same reason Daniel Boone did more than a century earlier: its low pass and the nearness of good sized streams on both sides of the ridge. The stream valleys became railroad beds and McKinney's place became the busy resort town of Altapass, the highest point ('Alta') on the railroad, but the lowest for miles either way on the Blue Ridge. The orchard was named for the town and has outlived it. Altapass, bypassed by the automobile, withered and died with the decline of passenger service on the rails. The golf course, two hotels and a boarding house, and the train station itself are gone.

The Blue Ridge has long been recognized for apples. The first to bring them here was Charlie McKiimey, Scottish bom first settler in the late 18th century who gave his name to McKinney Gap. "Cove" Charlie engraved his name in other lasting ways to the area. His four wives and 48 children have richly blessed the area with kin who retain his keen humor, slim good looks and outstanding musical abilities. Stories of Charlie and his clan continue to enrich the orchard visitors as they are told and retold on any excuse at orchard events.

Orchards flourished nearby at the Cone Mansion in the last decade of the 19th century, ten years before the railroad

company planted orchards here and adjoining at Hefner Gap. The railroad could transport apples to East Coast markets long before roads were good enough. Since they already owned the land, planting apples made economic sense for the railroad, an early example of industrial diversification.

The railroad literally put Altapass on the map, even named it. The railroad was the CC&O, became the C&O, is now the CSX, and still runs 30 fieight trains a day past the orchard through the Blue Ridge down to the Piedmont. The skills and fmances of a large company were needed to gouge an orchard out of this land. Roads were terraced into the steep mountain side and trees planted on the slopes between the roads. Horses and mules pulled the sledges to dig the roads. Preparing the land, planting the trees, mowing, weeding, grubbing the land, spraying, pruning, thinning, picking, hauling, storing, sorting, boxing, shipping, most of the work then as now was done by hand, hard work open to the elements.

The C&O Railroad and the Altapass Orchard employed most of the workers here for the century's first 3 decades, then the orchard and the mines, when the railroad lost customers to the automobile. For the first half of the century the orchard held its own as high paying employment. Most families in Altapass had income from the orchard as well as fond memories and interesting stories about the characters who brightened the orchard operation. In the late 30's the Blue Ridge Parkway sliced the orchard in half and claimed a third to build the "scenic" as the Blue Ridge Parkway was called. The war drained the labor supply in the 40's and by the 50's the Altapass Orchard was 1/3 of the size it previously enjoyed. It had lost its critical mass, and together with increasing labor costs, inside jobs at furniture and clothing manufacturing plants, and absentee owners, the Orchard continued its decline. By 1995, only 80 acres of trees remained, just a quarter of the number of its heyday, and many of them were neglected. It appeared to many that the future of the land lay, sadly, in developing it for seasonal and retirement homes for 'snowbirds' who wanted cool mountain summers and breathtaking beauty of the Blue Ridge.

The Blue Ridge Parkway is 'Johnny come lately' here. When the state of North Carolina condemned the land for the Parkway in the 1930's, it chose a strip through the middle of the orchard. A court challenge was established the value of the land. As a consequence, the orchard gave up a narrow passage, and the Parkway owns only a 200 ft wide corridor, with scenic easement on a small portion of the remainder. Thus, no restriction exists on most of the 276 orchard acres remaining. Any use is legally permissible.

Plans were being made privately by several individuals and groups to use this land for commercial development. More than one set of plans have been revealed to us since our purchase, with offers of partnership in the various ventures. When we moved to buy the land, we had no knowledge of these specific plans, but clearly the possibility of such plans motivated us. There is no doubt that had we not purchased the land it would not have survived development in some form. Now it is secure for at least the next generation.

So, how did we get this place? We are still not quite sure, maybe fate? The previous owners offered it as a charitable contribution to a nearby school, but requiring its continued operation as an orchard. No sale. They offered it to the Blue Ridge Parkway, but with no money available to the Parkway at that time, an actual 'act of Congress' would have been needed. No sale. Various informal negotiations were thought to be underway by local would-be purchasers. No sale.

Sister Kit saw an ad in the Spruce Pine News-Joumal and responded with a check the next day. The Orchard was secured.

Immediately we started leaming apple orchard operation and restoration, as the trees had been neglected for three to fifteen years. hi asking advice from a long time apple grower, Kit asked what would he tell his daughter were she to embark on such a journey. Following a moment of silence, he answered ' dig up those old apples and plant Christmas trees'. Good advice is hard to take when it isn't what you want to hear. We're still in apples. The first year we pruned, sprayed, and restored production to I 000 trees, adding 500 more each year. We believe there are 5000 trees altogether so we have plenty more to do.

In a previous job, planning was very important. We had short and long term plans, and a big part of our success depended upon following (we called it executing) the Plan. So we made plans for the orchard. Our plan had two elements: restore enough trees to provide fruit for the retail sales at the apple house, and open a craft, food and gift store during the peak tourist season. Can't miss getting a small share, 'our share' of the Y2million tourists passing the orchard each year on the Blue Ridge Parkway. The combination should be profitable enough to pay for the upkeep of the orchard, the preservation of the land, and not deplete our retirement income.

The first year was rocky: we went through 29 people to fill three full time jobs. We had labor strife (a grudge against the young foreman), dui arrests, forgery, domestic strife (with the employees, not Judy and me), among the other more expected daily problems of keeping an old sprayer and even older tractors running. As far as apples were concerned, we followed the plan: 5 bushels per tree. Of course it is true that only 2 bushels per tree were retail quality, and the other 3 were sold forjuice at 1/10th the return. But surely that was only a first year glitch. The retail business was characterized by minutes of customers and hours of waiting. All agreed that signs would help attract more folks down off the Parkway. Signs along the Blue Ridge Parkway? No way. Wouldn't that defeat the reason we bought the orchard in the first place? So we didn't get our share'. But we did notice that nearly every customer bought something, and almost all left happier than they arrived. Also bus tours and other groups loved the special attention we gave them, and we loved their concentrated buying power. We learned lots that first year.

The second year we refmed our Plan: we added groups to apples and tourists, focusing more attention on attracting groups. Since we added 500 more trees to production, we expected a 50% increase in apples. That year we learned about late frosts and hail. Our production fell to 2 bushels per tree, but more were retail quality. We stabilized our work force, only 3 full timers for the three field jobs. We concentrated personal attention from all store employees on each customer, helping them enjoy the feeling and history of the place. And we learned how many customers love ice cream and home made fudge. Sales in all but apples were up considerably, and people were coming back! Maybe not enough yet, but the encouragement was there. Plans, after all are only plans.

In the beginning of the third year, we learned about what a warm March followed by a frigid April and May do to apples, and to early May tourists... nothing good. Despite bringing into production a total of 21 00 trees, our crop may still fall short of the first year. Farining is a good experience for Planners. Everyone needs to know they aren't really in control! And I guess this applies to our entire Orchard adventure: its a great ride and where it takes us is still to be seen.

Preserving the Past and Protecting the Future: Planning in a Blue Ridge Parkway Community

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Abstract: *Little Switzerland is a small unincorporated town located in western North Carolina along the Blue Ridge Parkway. Historically, the residents have relied on deed restrictions to determine land use patterns which have been primarily residential in nature. Recently, increasing population density and diverse land uses threaten its traditional residential and scenic character. The community has now begun a planning process with landowners, two county governments, and the National Park Service. This process of bottom-up consensus building may yield a land use strategy that could be validated by all involved.*

LITTLE SWITZERLAND: BACKGROUND OF A BLUE RIDGE COMMUNITY

Little Switzerland began as a mountain resort in 1910, just two years after the CC&O Railroad completed the rail bed to the Blue Ridge. The final three miles from the Mt. Mitchell station yielded to mule drawn wagons along a toll road. Fine stone gates still mark the original entrance to the village, named after the rolling Jura Mountain region of Switzerland. The community sits atop the crest of the Blue Ridge at a site which provides panoramic views, clean water, a comfortable climate and a peaceful lifestyle.

The original founders established the resort village to be a summer retreat from the hectic pace of the city of Charlotte - lying 100 miles east on the Piedmont. They dreamed of a community where deed restrictions would define land use limits, but each owner could exercise considerable freedoms. While most of the land was "residential use only, with no store to barter or sell," an owner was free to "build a tent or a castle," the only stipulation being that there be only one residence per acre. Areas were set aside for agriculture, hotels, and businesses. Water sources and rights were carefully managed, and excess flow was reserved for a community water system that still serves a portion of the area. Roads were constructed, access easements were created, and a church and meeting hall were built to serve the new community.

From an aesthetic standpoint, it is not difficult to see why the founders chose to build Little Switzerland where they did, but the location of the community was, and still is, at the core of some very serious problems. Little Switzerland sits astride the line between McDowell and Mitchell counties - diluting its already slight political presence in local government. The construction of the Blue Ridge Parkway, which literally came right through the middle of the village, caused the church and meeting hall to be relocated, closed portions of existing roads, and swallowed up a considerable portion of the central core and residential areas for road right-of-way and scenic easements. No Master Land Use Plan was ever formally adopted by the residents, and as time went on, and second home development became more pronounced, the boundaries of the community itself became more amorphous.

Another serious problem faced by the community is the issue of deed restrictions as the primary method of den-

sity control and spatial arrangement. The last thirty-five years of the community's history has been marked by attempts to challenge these restrictions to allow development deemed unacceptable to the majority of residents. Some residents have subdivided their one acre parcels and constructed additional dwelling units. Various business enterprises have, with some successes, overturned the deed restrictions through court action. In 1991, a real estate office was established in a "residential use only" deed restricted area and was taken to court by neighbors with similar deeds (*Dunlap, Carson & Carson vs. Ridgeway & Schabilion, 90 CVS 372).* The real estate office was allowed to stay, and the judge counseled the community to seek stronger land use covenants and perhaps, zoning. Community confidence in their traditional land use controls was shaken again in 1993 when a rather conspicuous home was built in a previously restricted Parkway scenic easement.

TO DATE: THE INITIAL STAGES OF THE PLANNING PROCESS

In 1995, McDowell County began acknowledging and enforcing community initiated zoning in another area of the county. This sparked the interest of community leaders in Little Switzerland who thought that some type of zoning, initiated and conceptualized by the citizens themselves, might alleviate many of the problems they currently faced concerning land use. A series of open meetings ensued - and continue still, to identify the community's needs, prioritize concerns, inventory scenic and cultural resources, and investigate remedial options. A vision statement was formulated that strongly reflects the high value the residents place on scenic quality, biological integrity, and cultural and economic diversity. Several overarching priorities emerged: limit commercial development, enact a growth management strategy, develop a politically influential community organization, and clarify scenic easement arrangements with the National Park Service.

In 1996, planners from the Blue Ridge Parkway led a series of successful workshops to assist the community in identifying primary scenic and cultural resources. A grant to McDowell County from the Year of the Mountains Planning Initiative funded technical planning assistance and a survey which was mailed to over 500 area residents in both counties during the Spring of 1997. Over 45 percent of survey recipients responded and some specific concerns were identified, namely a fear of the proliferation of "tourist trap" commercialism, mobile home parks, billboards, and clear-cutting. Survey respondents also indicated a strong preference for protecting scenic easements for the community and Parkway, keeping housing density levels in line with traditional deed restrictions, and fostering the few remaining agricultural enterprises in the area. A well-attended meeting was held to discuss the survey results at which some residents in the surrounding areas expressed their concerns about possible "bureaucratic meddling" and private property rights. They resented the notion of restrictions that they felt were more appropriate for the village resort than the outer reaches of the surrounding areas. Tensions concerning relationships between newcomers/seasonal residents and families who have lived in the area for generations also seemed to surface. Questions arose concerning how the boundaries were drawn, who was included/excluded, and skepticism about government intervention and involuntary controls. The general consensus that has emerged at this point seems to be that there needs to be a more comprehensive attempt to specifically define

the geographical boundaries of the Little Switzerland community and that, within these boundaries, some type of land use controls are necessary to preserve the natural resources and cultural heritage identified by the residents.

FUTURE DIRECTION: OVERCOMING OBSTACLES AND EVALUATING THE OPTIONS

Before a growth management strategy for Little Switzerland can be formulated, two primary concerns will have to be addressed. First, the geographical boundaries of the core and outlying portions of the community must be defined more rigorously. Identification of the core village district will most probably parallel the original resort area as envisioned by the founders. There seems to be little debate concerning the need for, and willingness to promulgate, growth management in this area. The inclusion / exclusion of surrounding secondary areas will be much more problematic and, as indicated by public comment, open to a great deal more debate. Inclusion of specific parcels in both counties may ultimately rest on the individual landowners' willingness to participate and endorse the process and its eventual outcomes. In both instances, the determination and mapping of boundaries would be made much easier through the application of GIS (geographic information system) technology that would clarify the visual, spatial, biological, and jurisdictional relationships between these "out parcels" and the core area. No local land use plan to give legitimacy to land use controls can be formulated before this step is accomplished.

The second issue that must be addressed is the multi-jurisdictional complications associated with an area that rests within two counties. Land use controls in western North Carolina are considered with skepticism by some, as a sinister force by others. Though McDowell County has enacted some limited zoning in one small area, recent attempts to initiate more of the same have met with very vocal opposition from private property rights advocates - and Mitchell County has no zoning at all. Neither county has a professional planning staff, the technological resources, or the financial capacity to offer much assistance to Little Switzerland during the planning process. Uniform implementation and enforcement must be coordinated by the counties if regulatory approaches are decided upon. This is difficult, though not impossible. (An example: McDowell and Burke Counties jointly adopted and co-enforce the Lake James Protection Ordinance which regulates lakeshore development.) In any event, whatever strategy is eventually agreed upon by the residents, no matter how practical, must also have significant levels of political feasibility to ever become promulgated - a daunting task in the political climate of western North Carolina (Kalinowski, 1997).

For now, let us assume that these two problems, if not overcome, can at least be reckoned with. The next issue to be considered is the residents' tentative reluctance to accept the notion of regulatory land use controls. If we assume, as some residents of Little Switzerland do, that all land use controls must be voluntary in nature, then a continued reliance on deed restrictions to control density levels and land use types seems inevitable. Some residents have expressed a willingness to institutionalize the deed restrictions by creating more uniform legal text - capable of withstanding some levels of legal challenge. The primary utility of this type of control may be to set minimum lot sizes and restrict parcel subdivision. Unfortunately, the effectiveness of such a strategy will remain a mystery until

whatever challenges may materialize. Each judge can interpret things differently – as the residents of Little Switzerland have sadly discovered in the past. It would seem that relying solely on voluntary deed restrictions as a land use control mechanism would provide only mixed results at best.

Another option for the community may be to seek the assistance of an existing Land Trust organization, or possibly to establish one themselves. This would allow the area landowners to convey a portion of their holdings to the Trust to be used as a conservation or scenic easement – and thereby give up the right to develop or subdivide their property. This strategy could possibly provide some compensation and/or tax relief to the donors while helping to maintain the scenic vistas and biological integrity of the area. Money to purchase development rights is available from a variety of sources such as private foundations, federal and state grant programs, and various non-profit environmental organizations (Endicott, 1993). The comprehensiveness of this option however, depends almost exclusively on the willing participation of area landowners. With a high level of donors, and done in conjunction with strict density limiting deed restrictions, this strategy could be effective, particularly in attracting owners of out parcels who may have distaste for governmental intervention. Lands set aside in conservation or scenic easements could be maintained by a local community organization, a subdivision's homeowners' association, or perhaps by the Park Service (Arendt, 1996). This could proceed quite nicely until a direct threat manifests itself such as a fast food restaurant right off the Parkway, a "gem mining" tourist operation, or a large "chain" hotel locates nearby because a non-participating landowner decided to sell out. Voluntary participation may be a necessary "first step" in land use controls for Little Switzerland because it is the path of least resistance toward some level of growth management – but it will always be dangerously vulnerable.

As was mentioned earlier, some residents of Little Switzerland are opposed to any type of regulatory growth management strategies for the area. These people usually fall into one of two categories: those who oppose the measures as a perceived encroachment on private property rights, and those who have become disillusioned in the past through a disappointing experience with conventional regulatory land use controls. Traditional zoning ordinances that are not designed, implemented, and enforced well have often been responsible for eradicating what they were enacted to protect and may lead to "sprawl-type" development patterns and disconnected community dynamics (Arendt, 1994). There are, however, alternatives to enacting a conventional zoning ordinance such as creating preservation districts, subdivisions incorporating open space design, and conservation zoning techniques that are developed for a particular area's unique concerns.

One type of preservation district that could possibly be accepted by most residents would be a Neighborhood Preservation Commercial District in the core area of the village. This approach would allow the residents to preserve the unique character of the central area and determine what types of commercial enterprises could operate there. The 1997 survey indicated that most residents would like a doctor's office, artist studio, some types of retail establishments, and possibly a museum or music hall – but did not want to see more businesses that focused on tourists alone. Preservation districts of this type often incorporate design standards to regulate

the type and size of buildings, pedestrian and parking concerns, and common areas / landscaping for the enjoyment of the general public (Ewing, 1996). Permit approvals in a district of this type often are issued as a conditional use - meaning they are subject to any additional restrictions deemed necessary for that type of business. This would allow additional discretion in determining what types of businesses could operate in the central village area without prohibiting them completely - and not being able to have the types of business that they want in the first place.

A second regulatory measure that might be appropriate for the Little Switzerland area may be an open space design oriented subdivision ordinance. This would not prohibit the subdivision and prevent the development of large out parcels, but rather, it would limit the sprawl of structures across vast expanses of forested land. Open space design subdivisions typically have a smaller minimum lot size and cluster-type arrangement of structures while the remainder of the land, rather than becoming more lots, is dedicated as a permanently undeveloped area. This provides aesthetically pleasing and private neighborhoods while preserving significant portions of viewsheds and wildlife habitat. Additional benefits include a reduction in the costs of road networks and the provision of services such as utilities without a reduction in the total number of lots. At least one North Carolina county now requires an open space design plan be provided, in addition to a traditional plan, for all new subdivisions submitted for review. Final determination of which type of plan to chose is left up to the developer, however to date, nearly one half of the subdivisions subject to this requirement are being developed using the open space design concept (Orange County, NC 1996). Last year, the open space design concept for subdivisions was enthusiastically endorsed by the North Carolina Association of County Commissioners who now publish and distribute a descriptive guidebook to local planning agencies and developers (Arendt, Collins, and Valentine, 1996).

It seems that the growth management strategy best suited for Little Switzerland will most like begin as a sort of hybrid combination of some or all of these techniques. Even if all of these concepts are employed, land use determination will still be far from certain. Voluntary participation in deed restrictions will be patchy at best. A preservation district may be acceptable for the village core and perhaps, the immediate Parkway right-of-way area. Open space design subdivisions may provide an attractive option when developing some large surrounding tracts, but what about the other areas? A comprehensive zoning ordinance developed especially for this unique area, and adequately enforced by both counties, may be the most effective method for guiding the direction of land use in the area. The first step in crafting any zoning ordinance is to make sure the land use plan that has been developed for the area is current and describes a vision of what the community wants to achieve. Any zoning ordinance for Little Switzerland must incorporate the following concerns, as expressed by the residents repeatedly in workshops, meetings, and surveys: preserve agricultural pursuits in the area, protect the area viewsheds and wildlife habitat, avoid erosion and unsightly hillsides by avoiding development on steep slopes, maintain the unique and historic character of the community, and provide for the needs of the residents through thoughtful and creative development standards.

This may sound like a tall order for

a zoning ordinance, but it is possible when done in conjunction with the voluntary approaches previously mentioned. Little Switzerland is experiencing no pressing immediate threat at the moment, so talk about regulatory strategies is somewhat limited. A useful goal for community leaders in Little Switzerland at this point may be to educate themselves and their neighbors concerning the possible options – and the strengths and limitations of those options – before committing to a particular land use control method. This will pay off in the development of a successful, popular and effective strategy for ensuring the integrity of a very special Blue Ridge Parkway community.

WORKS CITED

Arendt, Randall G. Conservation Design for Subdivisions: A Practical Guide to Creating Open Space Networks. Washington D. C.: Island Press, 1996.

_____. Rural By Design. Chicago: Planners Press, 1994.

Arendt, Randall G., Marvin Collins, and Anne Valentine. Open Space Design Guidebook. Raleigh: The North Carolina Association of County Commissioners, 1996.

Endicott, Eve. Land Conservation Through Public-Private Partnerships. Washington D.C.: Island Press, 1993.

Ewing, Reid. Best Development Practices: Doing the Right Thing and Making Money at the Same Time. Chicago: Planners Press, 1996.

Kalinowski, Franklin A. "A Practical Solution to the Environmental Crisis: The Range of Options," Public Works Management and Policy. (2,1) July, 1997.

Orange County, NC Planning Department. Flexible Development Standards for Preserving Rural Character: A Design Manual for Conservation and Development. Orange County, NC: July 20, 1996.

The Botanical Gardens at Asheville – A Depository for Native Plants of the Southern Appalachian Mountain Region

Edward J.P. Hauser, Weaverville, NC

INTRODUCTION

The Botanical Gardens at Asheville (BGA) was founded in 1960 as a not-for-profit corporation. The BGA is located on a 10 acre site as part of the University of North Carolina at Asheville (UNCA) campus and operates under a Cooperative Management Agreement with that institution. The BGA is now incorporated as part of the UNCA long term Master Plan, The City of Asheville's Greenway Program, and is recognized as one of the cultural gems in the 1997 City of Asheville's Bicentennial Celebration.

The BGA is administered by a volunteer and elected Board of Trustees and Executive Committee of the corporation. Two paid employees are responsible for maintenance of the buildings, grounds, and plant collections. However, most maintenance is conducted by over 100 volunteer members of the corporation. It publishes a monthly newsletter titled New Leaf, which is distributed to its general membership.

This presentation will provide:

1) a historical account of the BGA growth and development,
2) review of its Mission Statement which focuses on the ex situ preservation of native plants of the Southern Appalachian Mountain Region, and
3) examples and illustrations of native plant preservation.

LOCATION

The BGA is located on a 10 acre site at the southeast corner of the UNCA campus, at the intersection of Broadway Avenue and W.T. Weaver Boulevard. The site is in the City of Asheville of Buncombe County, North Carolina (See Figure 1).

Geologically, it is part of the Blue Ridge Physiographic Province of the Appalachian Mountain System. Locally, it is part of the French Broad River Basin of the Asheville Plateau; said river is less than one mile from the BGA.

Floristically, the BGA is part of the Deciduous Forest Biome of North America. The Southern Appalachian mountains of this biome are recognized as harboring the largest biodiversity of deciduous forest plants in the world. Over 2,000 species of higher plants have been identified. Today, over 700 species are a part of the living collection maintained at BGA.

Significantly, the BGA site provides a variety of habitats and niches which can support diverse floristic plantings. Reed Creek is a perennial flow stream that runs east to west across the southern boundary of the gardens; it is receives water from two intermittent streams within the site. These waterbodies provide alluvial flats, upper and lower level terraces, hydric, mesic, and xeric niches. Open meadows occur between slopes that are closed canopy and open canopy providing for a variety of shade tolerant and intolerant species. Finally, rocky outcrops that are dry or wet from springs provide additional habitats for mosses, ferns, and hydrophytes. Thus, this 10 acre site provides niches to accommodate the needs of over 700 species.

HISTORY

The Botanical Gardens at Asheville (BGA) was organized by the Garden Club of Asheville in 1960 prior to receiving Articles of Incorporation from the State of North Carolina, and was originally known as Asheville - Biltmore Botanical Gardens, Inc., a nonprofit corporation. A brief two-page resolution by the Board of Trustees of Asheville -Biltmore College (predecessor of UNCA) was passed on November 13, 1960. Said resolution provided a statement allowing the 10 acre site to be used as a botanical garden for the collection of native plants. However, the final sentence of that resolution limited long term stability of the BGA ("It is the understanding of both the College and the Corporation that the Board of Trustees of the College shall always have final and ultimate decision in reference to the use and disposition of said land.").

With the conversion of Asheville - Biltmore College to UNCA in 1972, an Articles of Amendment was made by BGA, changing its name to the University Botanical Gardens at Asheville. However, no updated resolutions were initiated or passed by the University.

In spite of the original and limiting resolution between the BGA and College, an infrastructure of trails, service roads, bridges, gardens, and buildings was constructed by volunteers or built under paid contractual agreements. The layout design (Figure 3) was done by Doan Ogden, a nationally known landscape architect. Sources of monies raised by BGA for capital and operating budgets come from: membership dues, private donations, fund raising events such as "Days in the Gardens, sales profits from the gift shop, and grants from local foundations. No public funds have been used to support its capital and operating expense budgets.

Currently, income from an endowment of nearly $400,000.00 is used for budget purposes.

Concerns were raised in 1986 when UNCA completed its first ten-year Long-Term Master Plan without consulting BGA. Said plan targeted the 10 acre site of BGA for residential dormitories and parking lots to meet the needs of a growing university. Tensions between the groups reached a climax in 1993, when UNCA initiated construction of the South Ridge Residence Hall, adjoining an erosion sensitive steep slope, along the west boundary line of the gardens. As a result, the BGA adopted its current name, deleting "University" in 1995.

With the installation of a new UNCA Chancellor in 1996, changes in the University Board of Trustee's membership, and designation of UNCA as the Liberal Arts University in the North Carolina system of higher education, the executive committee of BGA approached the University, requesting negotiation of an appropriate

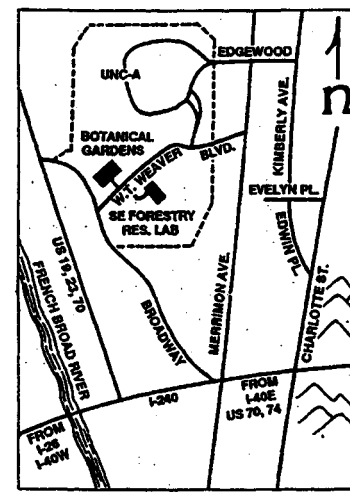

FIGURE 1. Site location map for the botanical gardens.

agreement that would define the roles and interrelationship of both parties. Chancellor Patsy Reed agreed that BGA was part and parcel to the mission of a liberal arts university. She recommended inclusion of BGA representatives in the 10 year Master Plan Development process in order to provide input and recognition into said plan, which the Board of Trustees would ultimately approve.

As a result, in 1997, BGA was included in the Master Plan as a support entity of the university and an appropriate Memorandum of Understanding was executed between BGA and the Board. Under agreement with the Board of Trustees of UNCA, the UBG has the right to maintain said tract of land owned by the University as long as it is used as a botanical garden and for university and community education programs. This document now allows BGA to pursue hiring of professional staff and seek funding sources.

MISSION STATEMENT

Article II of the most recently passed 1994 Bylaws of BGA states: " The objectives for which the Corporation is formed shall be to preserve and display the native flora of North Carolina and the Appalachian Region for the education and enjoyment of interested individuals and to stimulate research and interest in developing methods of caring for horticultural specimens of this region."

In 1995, a report was submitted to the BGA, by resource management consultant, Dr. Gurdon Tarbox, Jr., titled "The Botanical Gardens at Asheville Museum Assessment Program Survey". This report strongly recommended the adoption of a Long Term Master Plan that would maintain the current primary focus of maintaining the BGA as a depository and collection center for native plants of the Southern Appalachian Mountain Region.

The Executive Committee of BGA is currently developing a Master Plan to assure continued use of the gardens for its stated mission. In 1998, it plans to recruit professional staff and catalogue its living plant collection in accord with standards adopted by the American Association of Arboreta and Botanical Gardens.

Also, the Garden for the Blind is to be renamed the Multisensory Garden and is being retrofitted so as to provide a physical and botanical infrastructure of native plants, allowing for use by a variety of visually or physically impaired people. This garden has been designed by Ms. Mary Wilber, a local landscape architect. The remainder of this paper illustrates the nature of the native plant collection.

THE NATIVE PLANT COLLECTION - ECOLOGICAL CLASSIFICATION

Ecologically, plants native to the Southern Appalachian Mountains, fall into four biogeographic categories.

1) Pan-Appalachian Endemics

These are native plants that are typically found throughout most of the Appalachian Mountain Range from southern Canada to the southeastern United States. They are most characteristic of the Deciduous Forest Biome of North America. Good examples include:
Cornus florida (Flowering Dogwood), Allium tricoccum (Ramps or Wild Leek), and Acer rubrum (Red Maple).

2) Northern Appalachian Endemics and High Elevation Glacial Relicts.

These are native plants that are typically found in the Northern Appalachian Region. However, postglacial conditions supporting cooler climates

developed along the high ridges and slopes above 4,000' in elevation. Thus, segments of certain species colonized postglacial habitats of the "high mountain country" as the species complex migrated north, following retreat of the alpine glaciers and Wisconsin Ice Sheets.

Good examples of glacial relicts are Clintonia borealis (a Lily), Trillium undulatum (Painted Trillium), Sambucus pubens (Red Elderberry), and Viburnum alnifolium (Hobblebush).

3) High Elevation Endemics of the Southern Appalachians

These are native plants that are found only at high elevations (above 4,000') of the Southern Appalachian Mountain Region. Common representatives include: Magnolia fraseri (Fraser Magnolia), Abies fraseri (Fraser Fir), Sorbus americana (Mountain Ash), and Lilium grayi (Gray's Lily).

4) Southern Appalachian Endemics

These are native plants that are characteristic of the Southern Appalachian Mountains and are not restricted to high elevations. Representative species include: Claytonia caroliniana (Carolina Spring Beauty), Rosa carolina (Carolina Rose), and Dodecatheon meadia (Shooting Star).

THE CATALOG GUIDE

About 733 species of native vascular plants are currently found as part of the native plant collection at BGA, representing the above categories. These are catalogued by Family, Genus, and Species on the basis of their presumed evolutionary relationships (most primitive to most advanced). By affixing numbers starting with numeral one (1) to the first family, first genus of a family, and first species of a genus, and by awarding ascending consecutive numbers to additional taxa, an alphanumeric code is given to each species.

For example, Magnolia fraseri has the alphanumeric code 80: 2-4. This means it is the 80th family, second genus of the family, and fourth species of that genus. In addition all species are located as to a grid system with the north axes numbered 1-16 and the east axes coded A - U.

All catalogued species are listed in A Guide to the University Botanical Gardens at Asheville (1989), published by BGA. In this publication, listings of families, genera, species, code numbers, and dates of flowering are give. Figures 3 - 4 provide examples of said information.

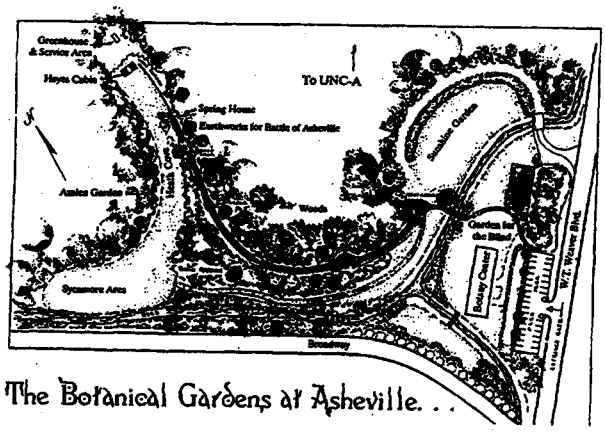

FIGURE 2. Layout of the botanical gardens as designed by Doan Ogden, landscape architect.

SLIDE ILLUSTRATED SPECIES

The following species listed in Table 1, illustrated by slides, are representative of the living plant collection of the BGA.

TABLE 1. LIST OF REPRESENTATIVE SPECIES OF THE LIVING COLLECTION OF THE BGA COLLECTION ILLUSTRATED BY SLIDES.

Scientific Name	Common Name	Biogeographic Category
Pan-Appalachian Endemics		
Monarda didyma	Bee Balm	
Viburnum acerifolium	Maple Leaf Viburnum	
Sanguinaria canadensis	Bloodroot	
Cornus florida	Flowering Dogwood	
Asclepias tuberosa	Butterfly Weed	
Impatiens capensis	Spotted Jewelweed	
Liatris spicata	Blazing Star	
Echinacea purpurea	Purple Coneflower	
Helianthus tomentosus	Rough Leaf Sunflower	
Rubus odorata	Flowering Raspberry	
Sedum ternatum	Wild Stonecrop	
Dicentra canadensis	Squirrel Corn	
Lindera benzoin	Spicebush	
Podophyllum peltatum	May Apple	
Caltha palustris	Marsh Marigold	
Lilium canadense	Canada Lily	
Smilacina racemosa	Spikenard	
Trillium erectum	Wake Robin	
Mediola virginiana	Indian Cucumber Root	
Northern Appalachian Endemics and High Elevation Glacial Relicts		
Taxus candensis	Canada Yew	
Lycopodium lucidulum	Shining Clubmoss	
Clintonia borealis	Yellow Clintonia	
Sambucus pubens	Red Elderberry	
Viburnum alnifolium	Hobblebush	
Lonicera dioica	Vine Honeysuckle	
Trillium undulatum	Painted Trillium	
Acer spicatum	Mountain Maple	
High Elevation Endemics of the Southern Appalachians		
Lilium grayi	Gray's Lily	
Magnolia tripetala	Umbrella Magnolia	
Magnolia fraseri	Fraser Magnolia	
Sorbus americana	Mountain Ash	
Oxalis acetosella	Wood Shamrock	
Shortia galacifolia	Oconee Bells	
Southern Appalachian Endemics		
Rosa carolina	Carolina Rose	
Dodecatheon meadia	Shooting Star	
Ilex opaca	American Holly	
Viburnum prunifolium	Southern Black Haw	
Amelanchier arborea	Southern Shadbush	
Claytonia caroliniana	Spring Beauty	

VALUE OF EX SITU PRESERVATION OF NATIVE SPECIES

Native species need to be preserved as living populations because of their aesthetic, ecological, educational, historical, recreational, medicinal, and scientific values for the peoples of the world, and in particular, the Southern Appalachian Mountains. Some plants may in the future prove to be of direct value to humans as sources of food, medicines, fiber, or other inherent properties which are not presently known.

An additional and unique scientific value of the Southern Appalachian plants is that many are at the peripheral edge of their range, or at sites disjunct from their range, or locally endemic. With the diversity of habitats and niches available in the Southern Appalachian Mountains, they are surviving and reproducing under varying degrees of ecological tolerance. Consequently, they provide a valuable and irreplaceable source of genetic stock for use in the study of:

1) ecotypic variation in local or isolated species populations,
2) biochemical, physiological, or morphological variation in local or isolated species populations,
3) genetic variation, i.e., chromosomal, DNA, mutational, in local or isolated species populations,

Once lost, such genetic material cannot be replaced or recreated.

The ex situ preservation of species provides an opportunity to maintain populations by collection from habitats and sites which are threatened by development or habitat destruction, i.e., clearing for agriculture, subdivisions, or logging. The BGA wishes to learn of native undisturbed habitats that are threatened by development so as to have the opportunity to provide for ex situ preservation.

The address for BGA is:

The Botanical Gardens at Asheville
151 W.T. Weaver Blvd.
Asheville, NC 28804
704/252-5190

In conclusion, the BGA represents a unique opportunity for the in situ preservation of our botanical natural history of the Southern Appalachian Region. Whereas, our national forests, state parks such as Mount Mitchell, natural areas along the Blue Ridge Parkway, i.e., Craggy Gardens provide for in situ preservation, the BGA provides another opportunity, where ever habitat loss is anticipated.

University Botanical Gardens
Phylogenetic Listing of Plants

	2 Equisetaceae	**Horsetail Family**
1-1	Equisetum arvense	Horsetail, Field
1-2	Equisetum hyemale	Scouring Rush
	3 Lycopodiaceae	**Clubmoss Family**
1-1	Lycopodium lucidulum	Clubmoss, Shining
1-8	Lycopodium obscurum	Ground Pine
1-10	Lycopodium flabelliforme	Running pine
	6 Ophioglossaceae	**Adder's Tongue Family**
1-1	Botrychium virginianum	Fern, Rattlesnake
1-3	Botrychium dissectum	Fern, Common Grape
	7 Osmundaceae	**Royal Fern Family**
1-1	Osmunda cinnamomea	Fern, Cinnamon
1-2	Osmunda claytoniana	Fern, Interrupted
1-3	Osmunda regalis	Fern, Royal
	8 Schizaeaceae	**Curly Grass Family**
1-1	Lygodium palmatum	Fern, Climbing
	9 Hymenophyllaceae	**Filmy Fern Family**
1-2	Trichomanes petersii	Fern, Dwarf Filmy
	10 Pteridaceae	**Maiden Hair Fern Family**
1-1	Adiantum pedatum	Fern, Maidenhair
4-1	Pellaea atropurpurea	Fern, Purple Cliff-Brake
5-1	Pteridium aquilinum	Fern, Bracken

8

FIGURE 3. Sample phylogenetic listing of plants from the Guide Book of the botanical gardens.

Calendar of Flowering Dates

Scientific Name	Common Name	Location	Jan.
Juniperus virginiana	Cedar, Red	G5	
Symplocarpus foetidus	Skunk Cabbage	H8.B11	
Hexastylis minor	Ginger, Small Heart-Leaf	J12	
Ulmus rubra	Elm, Slippery	G13.G13	
Corylus americana	Hazelnut, American	Q5.P7	
Acer saccharinum	Maple, Silver	P13.S9.R14	
Cardamine parviflora	Bitter Cress, Small-Flowered	R8.S12	
Ulmus americana	Elm, American	Q12	
Ulmus alata	Elm, Winged	T7	
Acer rubrum	Maple, Red	H7.O12.P9.T9	
Quercus laevis	Oak, Turkey	R14	
Alnus glutinosa	Alder, Black	J13	
Alnus serrulata	Alder, Tag	J13.C13.D11	
Illicium anisatum	Anise Tree, Japanese	H9	
Juglans cinerea	Butternut	R10.S4.D12.H3	
Cardamine hirsuta	Bitter Cress, Hairy	R8	
Chaptalia tomentosa	Sunbonnets	P10	
Aquilegia canadensis	Columbine	G9.H6.T10.S10	
Cerastium holosteoides	Chickweed, Mouse-Eared	R7.S12	
Ta...cum officinale	Dandelion, Common	F11.Q8	
Orontium aquaticum	Golden Club	D11.S11.K12	
Vinca minor	Periwinkle	N11.V6.S9	
Acer negundo	Box Elder	R12.S7	
Rhododendron austrinum	Azalea, Florida	U7	
Vaccinium vacillans	Blueberry	O8.O10.H8	
Populus grandidentata	Aspen	G5	
Fagus grandifolia	Beech, American	O13.I13	
Betula lenta	Birch, Cherry	P11	
Betula nigra	Birch, River	P12	
Sanguinaria canadensis	Bloodroot	O11.T10.I7.O8	
Cornus florida	Dogwood, Flowering	S11.R9.R9.P11	
Hepatica acutiloba	Liverleaf	G12.P10.O11	
Hepatica americana	Liverleaf	G12.P10	

37

FIGURE 4. Sample listing of plants from the Guide Book of the botanical gardens, indicating alphanumeric code, flowering dates, and location.

ACKNOWLEDGEMENTS

The author wishes to thank Mr. Glen Palmer, President of BGA and Chairperson of the Executive Committee for his guidance and review of this paper and to Dr. James Perry, Professor of Botany at UNCA, for his comments and review of this paper and use of the Justice Slide Collection held at UNCA.

REFERENCES

Duncan, W and L. Foote. 1975. Wildflowers of the Southeastern United States. The University of Georgia Press; Athens, GA, 296 p.

Duncan, W. and M. Duncan. 1988. Trees of the Southeastern U.S.. The University of Georgia Press; Athens, GA, 322 p.

Fernald, M.L. 1950. Gray's Manual of Botany (8th Edition), American Book Company, New York, 1632 p.

McClure, T.J. 1992. North Carolina's Mountain Treasures. A Report by the Wilderness Society; Southeast Regional Office; Atlanta, GA, 65 p.

Massey, J.R., et. al. 1983. An Atlas and Illustrated Guide to the Threatened and Endangered Vascular Plants of the Mountains of North Carolina and Virginia. USDA: Southeastern Forest Experimental Station (General Technical Report SE-20); Asheville, NC, 218 p.

Radford, A., H. Ahles, and C.R.Bell. 1968. Manual of the Vascular Flora of the Carolinas. The University of North Carolina Press; Chapel Hill, NC, 1183 p.

Swanson, R.E. 1993. A Field Guide to the Trees and Shrubs of the Southern Appalachians. The John Hopkins University Press; Baltimore, MD, 399 p.

Univ. Bot. Gardens - Asheville. 1989. A Guide to the University Botanical Gardens at Asheville. Asheville, NC, 157 p.

Wofford, B.E. 1989. Guide to the Vascular Plants of the Blue Ridge. University of Georgia Press; Athens, GA, 384 p.

The Dedication of the Great Smoky Mountains National Park by President Franklin D. Roosevelt

Philip A. Grant, Jr., Bronxville, NY

On May 22, 1926 President Calvin Coolidge signed into law a bill to establish the Great Smoky Mountains National Park. Although Congress and the President had completed the process of authorizing the Great Smoky Mountains National Park in 1926, the park was not officially dedicated until 1940.[1]

On September 2, 1940 President Franklin D. Roosevelt travelled to Newfound Gap, Tennessee to preside over the dedication ceremonies for the Great Smoky Mountains National Park. Accompanying,the President on that occasion were Secretary of the Interior Harold L. Ickes and Governors Clyde R. Hoey of North Carolina and Prentice Cooper of Tennessee. [2]

The date scheduled for the park's dedication occurred almost precisely-one year after the outbreak of World War II. During the eventful period between September 1939 and August 1940 Nazi Germany had conquered Poland, Denmark, Norway, Belgium, the Netherlands, Luxembourg, and France and had begun a sustained aerial bombardment of Britain.

Since President Roosevelt had been so preoccupied with a substantial number and wide variety of foreign policy questions throughout the spring and summer of 1940, it seemed likely that he would comment on the international situation in his address at Newfound Gap.[3]

The President's dedication speech attracted prime news coverage in all parts of the United States. Among the major daily newspapers publishing from page stories on Roosevelt's appearance were the New York Times, Washington Post, Chicago Tribune, Atlanta Constitution, and New Orleans Times-Picayune .[4]

In his opening remarks Roosevelt reminded his audience that the federal government was proving, its "devotion" to the national park system, pointing out that the Department of the Interior in the near future would be opening national parks in Michigan, California, and Washington. The President asserted: "Here in the Great Smokies, we have come together to dedicate these mountains, streams, and forests, to the service of millions of American people."

Alluding to the historical backgrolmd of the surrounding areas the President declared that there were trees "that stood before our forefathers ever came to this continent" and brooks "that still run as clear as on the day the first pioneer cupped his hand and drank from them." Roosevelt promised that in the Great Smoky Mountains National Park "we shall conserve these trees, the pine, the redbud, the dogwood, the azalea, the rhododendron, the trout and the thrust for the happiness of the American people."

The Chief Executive explained that the old frontier "lives and will live in these untamed mountains to give to future generations a sense of the land from which their forefathers hewed their homes." Recalling that the "hewing was hard" and the "dangers were many," Roosevelt stated:

> ...The rifle could never be far from the axe. The pioneers stood on

their own feet, they shot their own game and they fought off their own enemies. In time of accident or misfortune they helped each other, and in time of Indian attack they stood by each other.

Acknowledging that the American people "no longer face Indians and hard and lonely struggles with nature," Roosevelt complained that "we have grown soft in many ways." Obviously referring to the tragic reality of World War II, the President warned: "If we are to survive, we cannot be soft in a world in which there are dangers that threaten America - dangers far more deadly than were those that the frontiersmen had to face."

The President, citing a number of meaningful technological advances, argued that "Europe is closer to America today than was one side of these moutains to the other side when the pioneers toiled through the primeval forest." Noting that the tank, the bomb, and the airplane had replaced the arrow and the tomahawk, Roosevelt ascertained that the "threat is as close to us today as was the threat to the frontiersman when hostile Indians were luking on the other side of the gap."

Convinced that it was entirely appropriate to conserve the Great Smoky Mountains "for the benefit of the American people," Roosevelt also insisted that we had "to safeguard a greater thing: the right of the people of this countryto live as free men." In rather solemn words the President concluded: "Our vital task of conservation is to preserve the freedom that our forefathers won in this land."

Roosevelt, calling the United States a country "greatly blessed bythe bounties of nature," voiced regret that we "used up or destroyed much of out natural heritage just because that heritage was so bountiful." Charging that we had slashed our forests," "used our soils," and "encouraged floods," the Chief Executive maintained that "we were brought rather suddenly to face the fact that unless we gave thought to the lives of our children and grandchildren, they would no longer be able to live and to improve upon our American way of life."

The President was pleased to recognize that in recent years "we have tried sincerely and honestly to look ahead to the future years." In an optimistic analysis Roosevelt felt that the American people were "at last definitely engaged in the task of conserving the bounties of nature, thinking in terms of the whole of nature."

Reflecting on the future, the President expressed the wish that in one hundred years the Gteat Smoky Mountains National Park would "still belong in practice, as well as in theory, to the people of a free nation." Roosevelt, expressing concern over possibilities which might arise, speculated as follows:

...I hope that it will not be confined to people who come hither on Government specified days or on Government directed tours. I hope the trees will not be slaughtered bv the axe in order that a Government might conduct wars of aggression against other nations. I hope that roads and paths and trails will still be built in the cause of the liberty of recreation, and not confined to the ulterior purposes of a war machine controlled by an individual of an oligarchy.

Satisfied that a majority of Americans had come to comprehend the "danger" posed by the devastating war in Europe, Roosevelt surmised that the people of the United States were aware

that "such a danger cannot longer be met with pitchforks and squirrel rifles or even with the training or the weapons of the war of 1917 and 1918." The final sentiments expressed by the President at Newfound Gap were:

> The wind that blows through the wide sky in these mountains, the winds that sweep from Canada to Mexico, from the Pacific to the Atlantic have always blown on free men. We are free today. If we join together now—men and women and children—to face the common menace as a united people, we shall be free tomorrow.
>
> So, to the free people of America, I dedicate this Park.[5]

Franklin D. Roosevelt on November 5, 1940 was re-elected to an unprecedented third term as President of the United States. Serving in the White House longer than any Chief Executive in the nation's history, Roosevelt was to be involved in the creation of nine national parks during the years of his presidency. Delivering a forceful and eloquent address, the President on September 2, 1940 officially dedicated the Great Smoky Mountains National Park.

[1]The Statutes at Large of the United States of America, 1925-1927 (Washing-ton: United States Government Printing Office, 1927), XLIV, 616-617; United States Congress, Congressional Record (Washington: United States Government Printing Office, 1926), LXVI, 9362, 9451-9452; Freeman Tilden, The National Parks (New York: Alfred A. Knopf, 1968), pp. 44-50.

[2]Robert Sobel (ed.), Biographical Directory of the United States Executive Branch, 1774-1989 (Westport, Connecticut: Greenwood Press, 1990), pp. 193-194; Robert Sobel and John Raimo (eds.), Biographical Directory of the Governors of the United States, 1789-1978 (4 vols.; Westport, Connecticut: Meckler Books, 1978), III, 1157-1158, IV, 1505-1506; Francis P. Weisenburger, "Clyde Roark Hoey," Directory of American Biography, Supplement Six (New York: Charles Schribner's Sons, 1977), pp. 306-307; Graham White and John Maze, Harold Ickes of the New Deal (Cambridge: Harvard University Press, 1985), pp. 102-196.

[3]Wayne S. Cole, Roosevelt and the Isolationists, 1932-1945 (Lincoln: University of Nebraska Press, 1983), pp. 211-405; Robert Dallect, Franklin D. Roosevelt and American Foeign Policy, 1932-1945 (New York: Oxford University Press, 1979), pp. 144-251; Robert A. Divine, The Illusion of Neuteality (Chicago: University of Chicago Press, 1962), pp. 162-335; Mandred Jones, Isolationism in America, 1935-1941 (Ithace: Cornell University Press, 1966), pp. 161-236; William L. Langer and S. Everett Gleason, The Challenge to Isolation: The World Crisis, 1937-1952), pp. 11-404; Gordon Wright, The Ordeal of Total War, 1939-1945) New York: Harper and Row Publishers, 1968, pp. 1-45.

[4]Times, New York, N.Y., September 3, 1940, pp. 1, 2; Post, Washington, D.C., September 3, 1940, pp. 1, 2; Daily Tribune, Chicago, September 3, 1940, pp. 1, 2; Constitution, Atlanta, September 3, 1940, pp. 1, 4; Times-Picayune, New Orleans, September 31, 1940, pp. 1, 3.

[5]The Public Paper and Addresses of Franklin D. Roosevelt, 1940 (New York: The Macmillan Company, 1941), pp. 370-375; Michael Frome, Strangers in High Places: The Story of the Great Smoky Mountains (Knoxville: University of Tennessee Press, 1966), pp. 201-203.

Appalachian's Heritage:
The Evolution of the W.L. Eury Appalachian Collection, Appalachian Studies, and the Preservation of Regional Culture and History

Fred J. Hay, Appalachian State University, Boone, NC

At the dedication of the William Leonard Eury Appalachian Collection on October 18, 1971, Professor Cratis Williams said:

> "The William L. Eury Appalachian Collection contains . . . . books written about the Appalachian Mountain people, their traditions and lore, their culture, their institutions, their problems, and their region. In addition, there are collections of original poems, songs, and other writings of the people themselves as well as films and recordings of rapidly dying art forms and oral history in the mountains."

Williams asked "What is the significance of this collection?" His response:

> "In the early days of Appalachian State University the cultural tradition, handcrafts, and artifacts of the people served by the University were taken for granted. Educational programs were directed toward the orientation of the sons and daughters of the mountain farmers to a general American culture, and what lay immediately about them was largely ignored. In time, though, owing to the vision of such men as Dr. I.G. Greer, a native son and long-time instructor at the college, Dr. W. Amos Abrams, and the librarian, W.L. Eury, the institution became interested in building a collection of Appalachian materials for the use of students and scholars who desire to study the local history, culture, and social problems of the region. This collection, already one of the most important in the region, is destined to grow."[1]

I read these words of Cratis Dearl Williams (1911-1985) because he is, more than any other individual, responsible for the development of the Eury Appalachian Collection. Williams, a native of Lawrence County, KY began to collect traditional ballads of his region while still in high school. Later, while working as a high school teacher, Williams finished his M.A. degree in English from the University of KY. His thesis presented and analyzed 471 ballads and songs he had collected in the mountains of eastern KY. In 1942, Williams joined the faculty of Appalachian State Teachers College and in 1943 taught the first college course in what was later to be known as Appalachian Studies. In 1961, Williams received the Ph.D. from New York University. His 1661 page dissertation, The Southern Mountaineer in Fact and Fiction remains the definitive study of fiction about the region.[2]

Williams was a primary force behind the establishment of Appalachian Studies as a legitimate academic enterprise; the creation of the Center for Appalachian Studies at ASU and its undergraduate and graduate degree programs; the Appalachian Journal, long the premier scholarly serial for the region; and the Appalachian Consortium, a multi-institutional organization for the promotion and publication of

research on the region. A symposium organized to honor Williams on his retirement has become an annual event with its own sponsoring organization, the Appalachian Studies Association.

When Williams was preparing to teach that first course in Appalachian song in 1943, he first did a survey of the library's holdings and discovered there were only about 25-30 books having to do with Appalachia at what was then known as Appalachian State Teachers College. With Librarian W.L. Eury's support, Williams began to identify books on the area and on folk song and purchase them for the College's Library.[3]

This process of identification and purchase of Appalachian materials intensified and broadened in the early 1950s when Williams began work on his now famous dissertation. He, and Acquisitions Librarian Zeb Shook, would visit used bookstores and antique shops to search for relevant materials. Shook kept a list of all of Williams' many inter-library loan requests–the "Selective Bibliography" of Williams' dissertation was 57 pages and 840 citations–and sought through the out-of-print market to locate and purchase copies.[4]

During these same years from WWII to the 1960s, there was a renewed interest in programs of regional and ethnic studies. Some of these programs had existed for many years, but the existing ones like the newly created programs were greatly inspired and influenced by the international area studies model developed by the Social Sciences Research Council and funded, in large part, as part of the U.S. government's defense efforts. An essential component of the SSRC model was the development of interdisciplinary library collections.

Following the success of area studies in American universities, and with the increased national attention focused on marginalized areas, ethnic groups and peoples within the borders of the United States, the 1960s witnessed a blossoming of domestic area studies programs. New programs included African-American Studies, Chicano Studies, Appalachian Studies and so forth. These were interdisciplinary programs modeled on the foreign area studies and shared their need for comprehensive, interdisciplinary library collections.[5]

When Cratis Williams arrived at Appalachian State Teachers College in 1942, a comprehensive Appalachian Studies was not yet possible. However, scholars at the larger research universities had already taken an interest in collecting the musical and oral traditions of Appalachia and according to Williams: "That's why it was possible as early as the summer of 1943 to teach a course in Appalachian ballads and songs here."[6]

Williams in remarking on the gradual emergence of Appalachian Studies as a recognized and legitimate academic concentration said: "The big notion of discovering and cultivating ethnic subcultures didn't hit us until the end of the 1950s. At that time, of course, everyone who was of a larger subcultural group or ethnic group, began to concentrate on his ethnicity and it's this concept that is behind the notion of Appalachian Studies, Appalachian Centers, Appalachian Museums."[7]

The possibility of establishing a special collections area began to be discussed at ASU in the mid-1960s when the University's plans for a new library building were being drawn-up. Initially, library and university administrators thought in terms of a North Carolina Collection but Librarian Leonard Eury became convinced that the collection

should focus on Western North Carolina or the Southern Highlands rather than duplicate the efforts of North Carolina Collections elsewhere in the state.

The first edition of the Belk Library Handbook in 1968 included the following description:

> "A special collection of all available material about and from the Appalachian Mountain region is housed here. The library is interested in collecting both published and unpublished materials for inclusion in the collection."[9]

In 1969, Charlotte Ross was hired as the Appalachian Room's first Librarian. Ross was a native Appalachian from the mountains of North Georgia.

Her search for donations led Ross to expand the original mission of the Appalachian Room by expanding its collecting interests to artifacts. In 1971 a major artifact collection was received; the Riley-Fry Collection of hand made coverlets and shams. These had been made in Watauga and adjacent counties from 1900 to 1930.[10] Also in 1971, the Appalachian Room received the donation of the I.G. Greer Collection which included a number of antique dulcimers, in addition to his extensive song and ballad collections and field recordings.

In October 1971, when the Appalachian Collection was renamed and formally dedicated in honor of recently retired ASU Librarian Eury, it included 2500 published books.

In the early 1970s, the Eury Appalachian Collection received other important donations: the Jack Guy Collection of taped traditional music of the Beech Mountain area, and his photograph collection of local musicians and folk toys; the York Ballad Collection from Mocksville, NC; the Amos Abrams folksong collection and field recordings; Virgil Sturgill's diaries and performance repertoire; and the Daniel Boone Loom, which was over 150 years old and believed to have been used by the descendants of Rebecca Bryant Boone, Daniel Boone's sister.

The W.L. Eury Appalachian Collection was well enough established by 1973, that when the U.S. Army Berlin Brigade created an "Ethnic Exposition," it asked the Collection to supply the Appalachian portion. Publications, artifacts, photographs and other materials were lent to the Army in Berlin for this expo which highlighted the cultures of African, Asian, Hispanic, and Appalachian Americans for the purpose of increasing multicultural awareness and ethnic pride in the military community.

By the time Ross left the Collection in 1975 the book collection had grown to 7227 volumes. Eric Olson, the Collection's first professionally trained librarian, began his term as Appalachian Collection Librarian in June 1978.

The Eury Appalachian Collection had long suffered from insufficient space in Belk Library and Olson oversaw its move from Belk Library to the old D.D. Dougherty Library Building in 1980, and then to the newly acquired University Hall in 1984, and the expansion of its space in University Hall in 1990. Due to the large number of artifacts that the Collection had acquired, the University decided to remove them from the Collection, at this time, and to create a separate museum.

Olson retired from University service in 1993. During the Olson years, the Collection continued to grow and to add important manuscript collections, including the papers of Cratis Williams, North Carolina Congressman and Senator James Broyhill and the Appalachian Land Ownership Survey.

Through the years the Collection has continued to grow. We now house over 26,000 books; more than 14,500 reels of microfilm, 5300 microfiche, 2300 audiotapes and 800 videotapes and films, 1200 commercially produced phonodiscs, and 300 CDs and CD-ROMs; about 1,100 linear feet of manuscripts; 150 linear feet of clipping file containing articles from Southern Appalachian area newspapers about the region; over 100 periodical subscriptions, several hundred maps, as well as slides, photographs, and ephemera.

And the continued growth has forced us to continue moving. In 1996, after engineers determined that the weight of the Collection had increased beyond the capacity of its second floor University Hall location, space was renovated on the top floor of Belk Library and the Appalachian Collection returned to where it was first established in the Fall of 1968.

What is the significance of this Collection's history for the development of regional and ethnic scholarship? It is significant that the development of this special collection preceded and in many ways enabled the development of the regional studies academic program. Before the establishment of the Appalachian Collection a few individual faculty pursued research and offered instruction in Appalachian folklore and literature. But they were few, most important were Issac Garfield Greer who left ASU in 1933, Amos Abrams who left in 1946, and especially Cratis Williams, who served on the faculty from 1942 to 1976, and stayed on the scene until his death in 1985.

The Collection was there and growing before most of the scholars who specialize in Appalachia came to ASU and before the Center for Appalachian Studies and its degree programs were created, before Appalachian Journal published its first issue, before the Appalachian Consortium and before the Collection's spin-off the Appalachian Cultural Museum opened its doors.

I want next to briefly describe the kind of information that can be found in the unpublished materials of the Appalachian Collection. I use for my example the Abrams Collection.

W. AMOS ABRAMS COLLECTION

In 1974, former ASU English Professor, William Amos "Doc" Abrams donated to the W.L. Eury Appalachian Collection an assortment of documents. This collection included his correspondence from 1941-1972, his recordings of Appalachian folk song, his extensive folk song collection, the Moses Adams manuscript, his Wilcox-Gay portable record machine, tapes of some of his speeches, the text to 164 speeches, and a card index of speech texts which list locations and dates delivered, and most were delivered on multiple occasions.

While a student at Duke University, Abrams came under the influence of English Professor Frank C. Brown. Brown was an avid collector of folklore and Secretary-Treasurer of the North Carolina Folklore Society. Brown coordinated a state-wide collection of song and lore for the society which was eventually published in the seven volumes of The Frank C. Brown Collection of North Carolina Folklore (1952-1964). In 1936, Brown asked Abrams to help him collect folk songs in western North Carolina. For the next decade Abrams scoured the mountains in search of song. He also encouraged his students to collect songs for him from their families and friends.

The Abrams recordings are on the discs made on the old Wilcox-Gay recorder. Before donating the discs,

Abrams recorded each of 515 songs (i.e., 317 distinct songs and variants) from 130 individuals and groups onto reel-to-reel tapes with descriptive remarks explaining how he came to record the song and other notes on song variants and so forth. His recordings include songs by Horton Barker, Cratis Williams, Uncle Pat Fry, Frank Proffit (who Abrams and Brown first recorded), Mr. and Mrs. James York, and the first ever recording, in 1941, of a then 14 year-old Doc Watson, as well as many less well-known individuals.

The Moses Adams manuscript was acquired by Doc Abrams in 1937. It belonged originally to Moses Adams of the Dehart community in Wilkes County, North Carolina and is believed to date to around 1825, making it one of the oldest written records of Appalachian folk song. The manuscript is 41/2 x 8 inches with thirty leaves, handwritten on both sides, sewn together and bound in homespun cloth. It included about 22 songs, as well as, various marginalia about the songs and farm events.

Abrams eloquently described his donation in a letter he wrote ASU in 1974:

> "Among this collection of folk songs and folk ballads, of course, will be found broadsides, American songs, and religious, patriotic, epic, political, tear-jerking, comic, didactic, moralizing treatises–some of small value and some perhaps rare--but all composing a cross-section of folk song saga of our forebears and contemporaries who once lived and now live in Appalachia. To call the names of the singers and collectors who entrusted their treasures to me between 1935 and 1945 is but to call the roll of those who lived and now live within a hundred-mile radius of Appalachian State University.
>
> "The Child Ballads in the collection are those most popular in Western North Carolina, their popularity proved by the unusually large number of variant versions included. Written down often by the poorly educated and sung by the unlettered (but NOT unlearned), they brought to the mountains stirring and storied accounts of lords and ladies, kings and queens and a strange world beyond the deep blue sea.
>
> "In all, statistically speaking, the collection contains some 800 items (titles and variants thereof). Some of the manuscripts themselves, both typed and hand-written, are quite old. Some came from family collections; some copied from printed sources; and many, many from memory–from grandmother to mother to daughter and from grandfather to father to son. So mote it ever be!"

It is through study of the materials found in the monographs, family histories, government records, serial publications, and archival collections such as the Abrams Collection, that we can broaden and deepen our understanding of the traditional culture and history of the Southern Highlands. And in so doing, to paraphrase anthropologist Bronislaw Malinowski, we will be better able to grasp the Blue Ridge Mountain natives' point of view, their relation to life, to realize their vision of their world and the substance of their happiness. And without this kind of understanding, heritage tourism is a sham, is spurious, and is detrimental to the region and its people. Fortunately, there are a number of visitors to our region who realize this and come here not only to see the sights and to enjoy the vast recreational

possibilities but to learn about the region and its people, history, and culture. One of the places these tourists come to learn is to the W.L. Eury Appalachian Collection.

TOURISM AND THE W.L. EURY APPALACHIAN COLLECTION

We collect, organize, and provide access to documentation on the history of tourism in the region. This includes research reports such as Davé and Evans' *Travel Patterns & Behaviors of Visitors to the Southern Highland Region of the United States* (1994), historical works like Noblitt's *A Mansion in the Mountains: the Story of Moses and Bertha Cone and Their Blowing Rock Manor* (1996), records of tourism-related associations such as the Horn of the West and the Blue Ridge Parkway Association, taped oral histories of local residents describing early tourists and tourist developments, but also literature promoting tourist attractions such as the first issue in October 1912, of the serial publication *The Mammoth Cave Magazine,* subtitled *Mammoth Cave-Mecca of All Nations,* and featuring portraits of presumed visitors on its cover, including Ralph Waldo Emerson, Dom Pedro II, William Jennings Bryan, Jenny Lind, and King Edward VII, or the 1920 Signal Mountain Hotel brochure *Signal Mountain: A Place to Live* complete with someone's expense log pencilled on the inside back cover (rooms were $4 and breakfast was 50 cents) as well as other ephemera, like postcards and railroad schedules, associated with the tourism development of the region.

The W.L. Eury Appalachian Collection is also, in itself, a tourist attraction. Unlike the purposeful development of the Reynolds Historical Genealogy Collection of the Allen County Public Library in Ft. Wayne, IN as a very successful means of attracting visitors and their money, ASU did not intend to create a tourist attraction. But it did. Visiting scholars, genealogists, and journalists from around the country and world regularly visit Boone to use our resources. We've hosted visits of scholars from California, Maine, England, Ireland, Germany, and Japan, genealogists not only from Tennessee and Indiana, but from Texas, Oregon, Canada, and Australia. Indeed, located only a few miles from the Blue Ridge Parkway, the W.L. Eury Appalachian Collection is like the museums, craft shops, scenic views, and historic sites, one of the tourist destinations found along this magnificent linear park.

NOTES

1. Williams, Cratis D., "The Significance of the W.L. Eury Appalachian Collection," address delivered October 18, 1971 on the formal dedication of the W.L. Eury Appalachian Collection, Appalachian State University, Boone, NC.
2. Ross, Carl A., "Cratis Williams: The Man and His Legacy," in The Cratis Williams Symposium Proceedings: A Memorial and Examination of the State of Regional Studies in Appalachia, Boone, NC: Appalachian Consortium Press, 1989, pp. 1-4.
3. Baker, Barry B., "A History of the Appalachian Collection," ASU History paper, April 1979.
4. Williams, Cratis D., The Southern Mountaineer in Fact and Fiction, Ph.D. dissertation, 3 vols., NY: New York University, 1961.
5. Hay, Fred J., "The Subject Specialist in the Academic Library: A Review Article," Journal of Academic Librarianship 16(1), March 1990:11-17.
6. Baker, 1979, p. 2.
7. Baker, 1979, p. 2.
8. Baker, 1979.
9. Eastridge, Gwendolen, Library Handbook: A Guide to Resources and Services, Boone, NC: Appalachian State University, 1968, p. 16.
10. Fry, Annette Riley, "Bedspreads in the Mountain Manner," Americana, 6(2), May/June 1978:28-32.

South Carolina National Heritage Corridor

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The era of collectively conserving regional cultural, natural and heritage resources to encourage economic revitalization and promote sound conservation practices began in 1984 with designation of the Illinois & Michigan Canal National Heritage Corridor. Since then, Congress has granted federal recognition to fifteen heritage areas, corridors, and tour routes as National Heritage Corridors (NHC), National Heritage Areas (NHA), National Water Heritage Areas or National Heritage Tour Routes. Today I will discuss the South Carolina National Heritage Corridor (SCHC) recognized by Congress in 1996 as being nationally significant.

The South Carolina Heritage Corridor originated in a 1990 grassroots initiative in Abbeville, SC, which mushroomed into a resource promotion effort by the surrounding counties of Abbeville, McCormick, Edgefield and Greenwood during the 1996 Atlanta Olympics. As a part of the latter effort, the four counties applied for a "Cultural Visions" grant from the South Carolina Arts Commission. To stimulate rural cultural development, the Arts Commission, working with several other agencies, sponsored the innovative "Cultural Visions for Rural Communities" project to focus on cultural tradition and partnerships among cultural and economic organizations and other local entities. From these initial grassroots efforts, the larger concept of a heritage corridor evolved, uniting fourteen counties as a mechanism for building local pride of place and for creating rural economic development.

In 1993 the South Carolina Parks, Recreation and Tourism Department (PRT) was awarded an Intermodal Surface Transportation Enhancement Act (ISTEA) grant to develop a plan for the Heritage Corridor. The study was designed to determine the feasibility, cost and strategy for establishing a Heritage Corridor Plan for a 240-mile long area including 70 cities and towns. Running from the coast of South Carolina up one of its major river systems and into the foothills of the Appalachian Mountains, this corridor would cover approximately one third of the state.

In October 1994 Lane, Frenchman and Associates, Inc. and CityDesign Collaborative Inc., working with a multidisciplinary consultant team, were hired to prepare the plan. I acted as the landscape architect\preservation planner for the project. It should be noted that the boundaries and length of the Heritage Corridor had already been defined by PRT when the consultant team was brought aboard.

In order to incorporate as many interested individuals as possible into the process, not only were locals invited to numerous public meetings, but four Regional Boards, consisting of elected representatives and a variety of heritage-related committees of community, county and regional levels, were established to guide the process in their regions. Additionally, an Advisory Task Force was established to insure that the Heritage Corridor plan responded to local and state concerns, opinions and needs. The Task Force consisted of representatives from the Regional Boards, representatives of each Tour-

ism District, as well as ten state agencies. The Task Force met monthly and participated in directing the study while also offering a forum where state and local participants in the plan could share ideas and concerns.

Some of the key challenges that needed to be addressed during the planning process included unifying the length of the corridor with an overall identity and themes; the plethora of historic, cultural, natural and recreational resources in the fourteen counties involved; overcoming historic rivalries between the Upcountry and Low Country; identifying the national significance of the corridor; and most importantly, ensuring effective cooperation of local and state entities most responsible for making the corridor idea work.

The methodology for the project emphasized five steps: identifying goals and key issues through a visioning process which incorporated the public, Regional Boards and the Advisory Task Force; understanding the corridor's development history and determining interpretive themes that portrayed the development history; identifying, evaluating and mapping the historic, natural, cultural and recreational resources of the corridor; proposing alternatives for development of the corridor; and finally, proposing ways in which the chosen alternative could be implemented.

GOALS AND KEY ISSUES

To direct the planning project, a project goals questionnaire was distributed to the Advisory Task Force and all locals who attended regional meetings. The primary goals and key issues identified through that survey acted as the guiding force throughout the project. These included:

- Preserve the diverse types of historic resources which portray the range of settings and activities which have been significant to the entire corridor and to its individual communities;
- Educate residents and visitors about the history of the Heritage Corridor and its regions, building appreciation for the special qualities of its man-made and natural landscapes as well as its cultures and people;
- Facilitate expanded recreational and cultural tourism by South Carolinians and out-of-state visitors, capitalizing on the corridor's rich historical, natural and human resources;
- Define programs and projects which can achieve economic benefits from increased tourism throughout the corridor.

DEVELOPMENT HISTORY AND INTERPRETIVE THEMES

The four regions of the Corridor contain historic, cultural and natural resources which convey the culture and evolution of South Carolina and its rural way of life. Offering a cross-section of the South's land formations, the morphology and character of the landscape have been the fundamental determinant of the SCHC's evolution. The landscape has dictated the form and qualities of its use and settlement, and has delineated the Upcountry and Low Country providing the basis for agriculture and influencing variations in lifestyle. The crucial role the interrelationship of the land and its people played in the developmental history led to the creation of an Historian Advisory Panel, consisting of experts on all aspects of the history of the state. The panel helped the consultant team determine key periods in South Carolina history that reflected important connections between the

people and the land. The four periods identified were The South Carolina Frontier (prior to 1788); Imprinting the Landscape (1788-1880); Industry Alters the Landscape (1880-1920); and Reshaping the Landscape (1920-present).

Two overarching interpretive themes, spanning the cultural, historic and natural traditions of South Carolina, emerged from these identified historic periods. The first theme, Working Places: Farms to Factories and Beyond, had four subthemes: Working the Land; Traversing the Land: Rivers, Rails and Roads; Politics and Commerce; and the Roots of Southern Industry. The second overarching theme was Southern Culture: A Rural Heritage, with the subthemes of Convergence of Cultures; Institutions of the People; Folklore and Folkways; and Leisure and Recreation.

IDENTIFY, EVALUATE AND MAP THE RESOURCES

Each of the four planning regions offered an abundance of historic, cultural, natural and recreational resources. In order to inventory, evaluate and map these resources, a GIS database was created. More than 1,800 resources were identified and geographically located. The following are the major categories identified in the database:

Historic Resources
- Historic Structures
- Historic Sites
- Historic Routes and Trails
- National Register Sites and Districts
- Local Historic Districts
- Archaeological Sites

Cultural Resources
- Events and Festivals
- Museums
- Cultural Lodging
- Cultural Restaurants
- Folk Traditions
- Miscellaneous Cultural Features

Natural and Recreational Resources
- National Forests
- National Parks
- State Parks
- Local Parks
- Other Conservation Areas
- Bike Routes
- Hiking Routes
- Scenic Highways
- Hunting Areas
- Fishing Areas
- Boat Ramps/Marinas

Visitor Services
- Welcome Centers
- Visitor Centers

All the resources were mapped by region where the public, Regional Boards and Advisory Task Force were involved throughout the inventory and mapping process. Regions reviewed their maps in order to identify resources they felt were of highest significance or priority.

The team felt it was important not only to identify individual resources but to ascertain whether resources existed in readily recognized patterns. Hence a broad survey of cultural landscapes and settlement patterns was undertaken. The cultural landscapes included: Low Country Plantations, Transitional Agricultural, Woodlands, Railroad, Mill and Maritime Landscapes. The six typical settlement patterns identified within the corridor were: Agricultural Trading Centers, Centers of Commerce and Trade, Resort Towns, Mill Towns, Railroad Towns and Courthouse Towns.

Additionally, visual characteristics were broadly identified and analyzed for 2,400 miles of federal, state and county roadways that criss-cross the corridor. Emphasizing the numerous entry points into the corridor, the team reviewed the historic integrity and

scenic potential of each roadway and entry into a town. The focus was not merely on the primary routes, but on virtually every major roadway crossing the corridor.

A detailed tourism and economic development inventory occurred simultaneously with the physical resource inventory. The tourism and economic development inventory reviewed demographic and employment characteristics, extant tourism and promotion efforts, and current projects and partnerships that had been or were being built.

HERITAGE CORRIDOR PLAN AND IMPLEMENTATION

The Heritage Corridor Plan weaves together all aspects of the inventories offering ideas for management, maintenance, and tourism promotion including cost estimates and implementation phasing plans. The final plan for the Heritage Corridor operates at three levels: Corridor-wide, regional and local.

Visitor infrastructure improvements focus on byways and linkages, with two parallel routes designated along the length of the corridor which pass through representative cross-sections of the corridor landscape and its regions. The need for visitor services through the corridor is addressed via four Regional Heritage Discovery Centers, one within each region. The purpose of the Regional Heritage Discovery Centers is to provide tourism information and interpretation through exhibits, regional tour routes, guides, wayside exhibits, and heritage host programs. These centers will be the focal points for cooperative regional tourism marketing efforts. The plan encourages local interests to create new tourist facilities and attractions which use the corridor's heritage resources.

Resource stewardship is of utmost concern within the corridor for unless the resources are protected and preserved, the essential "flavor" of the corridor will be lost. Resource stewardship mechanisms for historic, cultural and natural resources were proposed.

An important aspect of the project was identifying the national significance of the corridor to determine if it may be eligible for federal recognition and ultimately funding. It was found that the SCHC is a unified working landscape of significance to both the State of South Carolina and the nation. Several factors contribute to the national significance of the Corridor: the clarity with which the landscape of the corridor conveys the culture of South Carolina; the development of an integrated system of cotton cultivation, transportation and manufacture; the role of the South Carolina Canal and Railroad Company in interstate development and trade; the corridor as the site of pivotal events in several United States conflicts; and the significant role of the corridor in shaping African-American heritage and culture.

Implementation of the Plan recommends creating a South Carolina Heritage Partnership, which can focus on the specific coordination, funding, implementation and management requirements of Heritage Corridor development. The functions of this partnership would include program direction, coordination, stewardship, technical assistance, development of standards and criteria, project definition and support, and public information. Three implementation phases were proposed with detailed associated costs for each phase.

The action agenda proposed establishing the Heritage Partnership, initiating intensive liaison with the National

Park Service, working with SCDOT to establish corridor byways and signage programs, preparing corridor guides, working cooperatively with local entities, preparing initial studies of the Regional Heritage Discovery Centers, and developing monitoring mechanisms, stewardship compacts and marketing strategies for the corridor.

CURRENT STATUS

Since the final heritage corridor plan was accepted by PRT and the Governor of South Carolina in 1995, several of the proposed actions have occurred, along with other initiatives including:

- Creation of a Heritage Tourism Development Office at state level including representatives from business developers, nature-based developers, community developers, and preservation planners;
- Hiring of regional coordinators for each of the four regions;
- Funding has been designated from the state for $1 million each year for ten years plus a $100,000 matching fund for staffing;
- Creation of a non-profit advocacy organization, the Heritage Partnership, located in Edgefield, SC–a community that has been a strong advocate of the heritage corridor from the beginning;
- Talks have begun with NPS Southeast Support Office, which has offered technical assistance with interpretation and the Regional Discovery Centers in the corridor;
- SCDOT is in the process of finalizing the corridor signage and installation will begin soon;
- Preparation of a marketing package for the corridor;
- Partnership building in each of the regions: identify businesses and industries (two per region) that have a strong reputation for supporting local and state-wide initiatives;
- Initiation of the Savannah River Scenic Highway.

The reaction to the designation of the South Carolina National Heritage Corridor has motivated new economic initiatives at the state and local levels, lending credibility to the project and aiding in the search for future funding.

A Blue Ridge Heritage Corridor: Celebrating Our Past, Creating Our Future

Guiding development along a linear roadway corridor to retain natural, cultural and scenic values: Application of open space preservation principles and conservation design techniques along the proposed New River Parkway

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ABSTRACT

The New River Parkway is being planned as a two-lane scenic roadway along a portion of the New River in southeastern West Virginia linking rich and diverse natural, cultural and scenic resources together with local communities throughout the region. The intent of the parkway is to serve as a principal recreational amenity for the motoring public by providing a leisurely driving experience along the New River and Bluestone Lake and through the rolling uplands of the surrounding Allegheny plateau in a manner analogous to the Blue Ridge Parkway in Virginia and North Carolina.

In response to growing development pressures along portions of the New River, the New River Parkway will be accompanied by a Land Management System (LMS) containing provisions to implement resource management and protection policies of the New River Parkway Master Plan for an approximately 1,000-foot wide linear corridor along the scenic roadway. The LMS establishes procedures, standards and regulations for the review and approval of site plans within the parkway corridor. As a portion of the parkway traverses lands within the boundaries of the National Park Service (NPS) managed New River Gorge National River, the LMS is being crafted to be compatible with NPS management policies which support the conservation, preservation and interpretation of outstanding natural, cultural and scenic values in and around the New River gorge for the benefit and enjoyment of present and future generations.

The paper presents an overview of evolving open space preservation principles and conservation design techniques for rural landscapes. A sensibly balanced land management approach is advocated whereby conventional land development activities which follow standard zoning and subdivision practices are modified to achieve creative development scenarios using land planning and design techniques that effectively retain natural, cultural and scenic functions and values. The paper discusses and illustrates how conservation design techniques can be applied to rural lands, specifically to rural land within the parkway corridor, in a manner that seeks to balance resource conservation concerns with community development goals. By encouraging or requiring conservation design projects which utilize flexible site layouts, incorporate compact clusters of down-sized lots and follow other innovative land development strategies, important natural, cultural and scenic values can be retained in a manner that helps preserve rural character and enhance the quality of community life.

Conservation design promotes the preservation of open space resources such as woodlands, wetlands, stream corridors, farmlands, and areas of cultural and historic significance which function as valuable natural, social and recreational amenities for community residents. Just as important, the preservation of such open space resources offers opportunities for the creation of a more integrated network of protected open space lands. The paper highlights the benefits and implications of linking local open space resources to the larger network of interconnected open spaces and rural landscape types.

BRIEF PROJECT OVERVIEW

The northern section of the proposed New River Parkway is located along the New River in Raleigh and Summers counties of southeastern West Virginia between I-64 and Hinton. The New River provides the boundary between the two counties within the project study area, with Raleigh County on the west bank and Summers County on the east bank.

In 1978, Congress passed legislation creating the New River Gorge National River (NRGNR) as a unit of the United States Department of the Interior (USDOI), National Park Service (NPS) to encompass a 50-mile long, 62,000-acre river corridor through the Appalachian Mountains in southeastern West Virginia. River-based recreation goals identified in the NRGNR General Management Plan focus on providing opportunities for high quality river recreation experiences while minimizing adverse impacts to the natural, cultural and scenic resources associated with the New River. The General Management Plan discusses land protection within NRGNR boundaries in relation to concerns about uncontrolled growth on undeveloped private lands. Consistent with the national interest in the New River gorge, the General Management Plan states that the NPS will encourage the preparation and adoption of land use regulations (where they do not exist) for lands within and adjacent to the national river.

Heavy visitation and use of NRGNR facilities is a growing concern in the project study area. Increased public demand for access to the river and other scenic areas coupled with the development of single family homes along the river have resulted in disturbance to private properties and threaten the environmental integrity of the New River. In response to increased visitation and the need for public access along different points of the river, and, in accord with the need for better protection of river resources, the concept of a scenic road or "parkway" along the New River evolved over the past decade.

In 1985, the West Virginia Legislature passed legislation formally creating the New River Parkway Authority (NRPA) to oversee the planning of the New River Parkway. Consistent with NRPA Concept and Master Plans, the intent of the New River Parkway is to provide a quiet, attractive and leisurely alternative to existing interstates and highways in southeastern West Virginia. Through the Surface Transportation and Uniform Relocation Assistance Act of 1987, Congress authorized federal funding of $17.6 million toward construction of the northern section of the New River Parkway as a demonstration project to be built under the direction of the West Virginia Department of Transportation, Division of Highways (DOH).

In 1986, the New River and its associated aquatic, wetland and riparian habitat areas were classified by the USDOI Fish and Wildlife Service (FWS) as Resource Category 1 in accordance with FWS mitigation policy. The mitigation goal for Resource Category 1 habitat is no loss of existing habitat value; all losses of existing habitat are to be prevented as these areas cannot be replaced. Insignificant changes that do not result in adverse impacts on habitat value may be acceptable provided they will have no significant cumulative impact.

In 1988, the West Virginia Legislature granted additional powers and responsibilities to the NRPA to develop and set forth land use regulations and performance standards. These standards and regulations will affect lands

500 feet on either side of the roadway centerline, an area hereafter called the "parkway corridor." Implementation of land use controls within the designated parkway corridor is to be carried out under the New River Parkway Land Management System (LMS). The intent of the LMS is to help ensure that areas within the parkway corridor are protected and managed appropriately, to preserve the fragile character of resource areas currently at risk.

The LMS is being crafted to be compatible with NPS policies contributing to the preservation and maintenance of this portion of the NRGNR. Current legislation requires that relevant local governmental entities adopt and enforce the LMS. In April 1995, administrators from Raleigh, Summers and Mercer counties met and agreed to work together with the NRPA to develop and implement appropriate land management standards and guidelines within the parkway corridor.

REVIEW OF PLANNING CONCEPTS AND ISSUES

In general, *planning* is a means for preparing for the future within a context of constraints and opportunities–most of which are known (hopefully) and some of which are not known. According to the American Planning Association "planning is a comprehensive, coordinated and continuing process, the purpose of which is to help public and private decision makers arrive at decisions which promote the common good of society."[1]

Planning professionals have encouraged the use of the comprehensive plan as a rational basis for land use decisions based on "a theory of planning as a rational process of choice between different development policy alternatives."[2] The formulation of a comprehensive plan (sometimes called a master plan or community plan) for a locality or corridor (as in the case of the New River Parkway) is ideally a product of a comprehensive, coordinated and long-term process. The comprehensive plan represents a vision of where a locality or group wants to go and how it intends to get there, and serves as a policy guide for public and private decision making.

The adoption of land use regulations is a common implementation technique used to address the goals and objectives endorsed in comprehensive plans. The authority for local land use planning and regulation is derived from the "police power" that empowers states to enact laws to protect the public health, safety and general welfare. States have delegated substantial portions of this broad regulatory authority to local governments. Zoning is the most commonly used regulatory tool to plan how land is used and to physically separate potentially incompatible land uses. Zoning regulates the use of land and structures and determines the dimensional characteristics of permitted uses, such as minimum lot sizes, the placement of structures on lots, the density of development and the maximum of buildings.

In an effort to slow development and preserve open space lands, many communities have applied large-lot zoning techniques which support low-density development and minimum lots sizes from 10 to 25 acres. Such large-lot, low density development serves to push new development farther out into rural areas often converting valuable agricultural land and other open space lands into residential districts with little preservation of community open space lands. While zoning ordinances can be used to designate recreation areas and to protect sensitive environmental resources that limit development (such

as steep and unstable slopes, and soils unsuitable for septic systems) conventional zoning has encouraged sprawling, large-lot, low-density developments designed with little regard for natural, agricultural, scenic and historic resources, with little variety in terms of housing design and density, and with no or limited provision of open space for community residents and the general public.[3]

More often than not, conventional zoning has failed to protect the environment resulting in serious detrimental impacts to forests, floodplains, wetlands and prime agricultural lands. Increasingly, zoning ordinances have been revised to be more environmentally responsive through the regulation of nondimensional aspects of development such as landscaping, architectural design, signage, traffic circulation, stormwater management, natural and aesthetic resource protection, and open space preservation. In this way, conventional zoning is gradually being replaced by a more flexible, comprehensive approach to land management that stresses the use of performance standards to guide development and reduce environmental impacts.

Performance zoning has been developed to address areas of regulation where conventional zoning has failed, and offers a more flexible approach to land use regulation imposing minimum levels of performance that must be met by each land use and development proposal.[4] Flexible land management systems normally retain or supplement the traditional zoning districts but impose performance standards for site design, residential land uses and many environmental concerns. Communities adopt flexible zoning systems to achieve some mix of development objectives, usually involving fiscal, land use, administrative, environmental and development quality concerns. In developing a flexible approach to zoning, case studies reveal that communities generally hope to achieve one or more of the following goals:

- promote orderly development by ensuring appropriate locations, desirable densities, compatible relationships and a proper balance of uses;
- encourage patterns and types of development that minimize infrastructure and other development costs;
- improve administration of the development approval process and insulate it from political pressures;
- provide for land use types and locations responsive to market needs without excluding significant uses;
- stimulate high-quality site and building design; and
- preserve environmental resources.[5]

Flexible zoning ordinances typically focus a good deal of attention on requirements to protect natural resources and, in so doing, incorporate extensive provisions to protect and conserve agricultural lands, lands subject to erosion, wetlands and other types of sensitive lands. Building upon the efforts of environmentalists to protect natural resources, flexible zoning systems provide a more unified approach to environmental protection than most conventional zoning and subdivision ordinances. However, based upon a review of flexible zoning systems in seven communities, the authors of *Flexible Zoning: How It Works* conclude that " . . . flexible provisions are only as good as the standards and criteria by which they are implemented and fully succeed only when linked to comprehensive plans and ordinances for environmental protection."[6]

Rural Landscape Planning

The Center for Rural Massachusetts was created by the Massachusetts legislature in 1985 in recognition of the vulnerability of farmland to development. In 1986, the Center received a grant from the Massachusetts Department of Environmental Management to develop practical guidelines for rural landscape protection. In noting the creation of a new discipline called "Rural Landscape Planning", the Center sought to develop guidelines which deal directly with development issues in the countryside, essentially a blending of regional planning with landscape architecture. The Center's staff was concerned that the rural character of the state was severely threatened by conventional suburban development and that vestiges of the traditional rural landscape would become "islands surrounded by a sea of sprawling low-density development similar in nature to the land-use pattern ringing most of the major metropolitan centers throughout the United States."[7]

Noting that the development design process needs to encompass the total landscape of an area while creating "quality landscapes for our new ways of living", the Center argued that development projects such as residential subdivisions and shopping centers must be *deliberately* designed "to help preserve rural ambience while still accommodating inevitable growth in a responsible manner."[8] In the place of standard zoning and subdivision practices which encourage sprawl development, the Center recommended regulatory revisions which would require all new developments proposed on open fields or pastures to be laid out so that no more than 50 percent of the farmland is consumed by streets and lots, and a reduction in lots sizes by 50 percent with the resultant open space permanently protected by conservation restrictions for future agricultural use. The Center noted that this land-conserving approach to rural development was specifically designed for implementation in small towns as it would involve little public expenditure, be easy to administer, allow full equity for rural landowners and be fair to developers.[9]

Cluster Development

Essentially what the Center for Rural Massachusetts advocated was the notion of "cluster development" as summarized in William Whyte's publication *Cluster Development*. Whyte wrote that "if there is to be any environment worth living in, there must be a much more efficient use of the land" and noted that this need "calls for many approaches but the essence is the cluster idea, on the regional as well as the community scale."[10] Whyte noted that clustering development on a site is a more effective use of land when compared to conventional development, and the range of choice provided with cluster development "opens up great opportunities" for the development of land and preservation of open space.[11]

The basic premise of cluster development is the grouping of new homes on a portion of the development parcel so the remainder of the parcel can be preserved as unbuilt open space. Cluster development techniques are an outgrowth of performance zoning, and aim to control land use through the application of flexible design principles and the clustering of development on the most environmentally-appropriate portions of a site. Clustering development on a site helps conserve natural and aesthetic resources and increases the amount of available open space that can be transformed into community

parks and recreation areas. Clustering techniques have become increasingly popular as more localities experience unsightly and inefficient urban sprawl development and minimal or no preservation of community open space under conventional zoning.

However, experience has shown that when clustering and open space preservation approaches are presented as *options* to the developer, only a small percentage of developers choose to take advantage of the approaches while the vast majority continue to create "checkerboards of house lots and streets."[12] Generally, developers are reluctant to change their conventional development ways, either based on a lack of understanding of the benefits of cluster development or fears of increased development costs (or both), and will only do so when required by regulation. However, there are many economic as well as environmental benefits associated with cluster development that benefit the development community.

Cluster development typically does not result in greater overall development density on a site since the number of development units allowed on the site are simply rearranged to preserve natural and aesthetic resources and open space, and improve site design. Cluster development when compared with development associated with conventional zoning offers several benefits attractive both to community inhabitants and developers, including:

- limiting encroachment of development in and adjacent to environmentally sensitive areas;
- reducing the amount of open land disturbed by development, thereby encouraging the preservation of wetlands, woodlands, prime agricultural lands and rural landscapes; and
- reducing the amount of roads and utility lines needed for new development which can reduce development costs and lower the costs of housing and public services.[13]

Cluster development is both environmentally sound and economically realistic, and offers opportunities for collective sewer and water service and permanency and maintenance of open space. When planned and designed within the context of its surroundings, cluster development is an appropriate technique for developing land in a rural setting, offering tremendous advantages over conventional development. Advantages include:

- greater environmental sensitivity and responsiveness to environmental regulations;
- protection of neighborhood character by providing permanent open space for common use;
- enhancement of the environmental setting and potential dedication of historic or culturally significant features;
- creation of a wider variety of active and passive recreation uses;
- creation of a more diverse and architecturally interesting neighborhood;
- creation of a friendlier pedestrian environment, including walking and biking opportunities; and
- reduction in the need for and number of automobile trips.[14]

Recent research by the Center for Rural Massachusetts suggests that cluster developments which emphasize the preservation of open space allow undeveloped lands to be integrated into and around the grouping of structures on a site, and ensure direct access to considerably more open land than is possible with larger, residential houselots. Furthermore, the Center's research demonstrated a greater desire on the part of the homebuyer for a home with access and proximity to

permanently-protected land than for a home located on a bigger lot without the open space amenity.[15]

Similar research conducted by American Lives found that "consumers are putting an increasingly high premium on interaction with the outdoor environment through the inclusion of wooded tracts, nature paths and even wilderness areas in housing developments."[16] Research by American Lives noted that 77 percent of consumers put "natural open space" as the feature they desired most in a new home development.[17]

Planned unit developments (PUDs), also called planned residential developments (PRDs), are an improved alternative to conventional subdivisions which often utilize cluster development principles to achieve greater flexibility in lot sizing and configuration. However, as many PUD ordinances lack comprehensive standards which address the quantity, quality and configuration of resource protection or open space areas, environmentally-responsive design solutions are not always achieved.[18]

Rural Environmental Planning

Rural Environmental Planning (REP) is a method used by citizens in small towns and rural areas to plan for the future growth of their locality, and embodies the desire to enhance a community's long-term viability "by balancing economic development and environmental protection in accord with the carrying capacity of the land."[19] Noting that "conservation of the natural environment and development of the human community" are equally important planning goals, Sargent et al. contend that "economic growth can be a major goal only when it is compatible with environmental well being... based on the assumption that if the quality of the environment is maintained, land values will actually increase."[20] The protection of natural areas and the preservation of wildlife habitats are central objectives of the REP process based upon the underlying premise that conservation is understood to be "the prudent and sustainable use of natural resources."[21] In discussing the establishment of conservation designations or zones, Sargent et al. assert that the designation of land as a conservation area need not "deprive rural landowners of inherent land rights" but "may actually enhance land values by guaranteeing wise land use in an area."[22]

Citing work conducted by the Center for Rural Massachusetts in preparation of the document *Dealing with Change in the Connecticut River Valley*, Sargent et al. point to the benefit that clustering development on a site has on keeping land in agriculture and preserving open space. Noting that the quality and natural beauty of a rural's areas setting and its sense of place are its most basic characteristics, Sargent et al. indicate that rural communities "can accommodate physical growth and new economic activity while maintaining rural character" through a careful planning approach that balances natural resource protection, community values and economic concerns.[23]

Conservation Subdivision Design

The notion that conservation of the natural environment and development of the human community are equally important planning goals parallels the thoughts of Michael Corbett who argues that communities "designed without sensitivity to the natural setting do not reflect our true nature and will fail."[24] In response to the call for "social equity and ecological parity", Steiner describes the need for an *ecological planning* methodology to land development whereby "biophysical and sociocultural

information" are used together to "suggest opportunities and constraints for decision making about the use of the landscape."[25] Based on these (and many other) theoretical observations on the need for an integrated approach to land development that equitably considers human and natural systems in planning and design, an approach to rural planning has recently been put forward which advocates a practical alternative to conventional zoning aimed at the conservation of natural lands and the accommodation of human development needs.

Conservation subdivision design is a planning and design approach that advocates a new form of development for rural areas or areas along the suburban fringe which incorporates the resource conservation aspects of cluster development and the flexibility in lot sizing and configuration of the PUD. Conservation subdivision design, attributable to Randall Arendt of the Natural Lands Trust, refers to residential developments where "half or more of the buildable land area [of a site] is designated as undivided, permanent open space."[26] With this type of development, the overall number of dwelling units allowed on a site remains the same as under conventional development but residential neighborhoods are designed more compactly with resource conservation in mind.

Smaller lots and narrower single family homes, typical of traditional American villages and small towns, are recommended by Arendt to reduce the site area necessary for construction, and are related to concepts put forth in neotraditional or new town planning, also termed the "New Urbanism."[27] Single-family detached homes can be located on compact lots in a manner that conserves natural resources while providing attractive and economically viable housing opportunities. However, Arendt notes that a larger goal is to allow permanent open spaces within developed subdivisions to be "added to an interconnected network of green spaces and green corridors crisscrossing one's township or county."[28]

NEW RIVER PARKWAY LAND MANAGEMENT SYSTEM

The New River Parkway Land Management System (LMS) is being crafted for the purposes of: (1) preserving the scenic quality of the parkway corridor; (2) encouraging development which is appropriate for the scenic quality of the parkway corridor; (3) reducing development impacts to natural, cultural and scenic resources; and (4) promoting the health, safety and general welfare of residents and visitors. The LMS will establish procedures, standards and regulations for the review and approval of site plans associated with new development, changes in use and changes to existing site plans within the parkway corridor.

Performance Criteria and Standards

Performance criteria and standards specify levels of effectiveness or performance for uses and activities in relation to their ability to conserve, protect and/or manage important resources within the parkway corridor. Performance criteria and standards are the heart of the LMS and provide guidance as to how projects and activities should be planned, designed and implemented within the parkway corridor to meet the intent of the LMS. Performance criteria and standards are addressed in the LMS under the more general headings of environmental and development compatibility.

Compatibility Assessment Review Process

The Compatibility Assessment Review Process is the mechanism used to implement the performance criteria and standards established in the LMS, and is intended to encourage orderly, environmentally-conscious development and promote the health, safety and general welfare of the residents within and visitors to the parkway corridor. A primary objective of the generalized site plan review process, and the LMS-specific Compatibility Assessment Review Process, is to provide a mechanism for making informed decisions about the use of resources, especially non-renewable resources. As the population continues to grow, so grows the competition for the use of dwindling supplies of land, clean air and water, and energy resources. Therefore, it should come as no surprise that the initial, albeit crucial, step in the site planning process is the identification and analysis of sensitive resources through an environmental inventory process.

The environmental inventory step typically includes elements such as soils, slope and vegetation mapping, engineering analysis of soils, drainage patterns and sub-surface conditions, and an assessment of impacts that the proposed land use or uses may have on the environment. The information obtained in the environmental inventory stage of the site planning process lays the groundwork for all other decision-making stages and greatly influences how well (or how poorly) the final site design product responds to the unique characteristics of the site. The environmental inventory process can be a relatively simple or a somewhat complex endeavor based upon the complexity and size of the site under study. The conservation subdivision design process highlights the importance of the environmental inventory step in the site planning process.

Application of Conservation Planning and Design Principles within the Parkway Corridor

Conservation Subdivision Design

Arendt notes that "the conservation subdivision has as its central principle the preservation of natural lands as building blocks in community-wide open space networks" and is an appropriate development approach in less developed areas where central water and/or sewer is not available.[29] Therefore, the most important step in designing a conservation subdivision is the identification of natural lands to be preserved as open space on the site.

Initially, *primary conservation areas*, including unbuildable areas such as wetlands, watercourses, floodplains, and restrictive soils, slopes and geologic formations, and *secondary conservation areas*, including sensitive areas such as prime agricultural lands, woodlands, significant natural features, scenic, recreational and cultural resources, and buffer areas, are delineated through the environmental inventory process. The identification of primary conservation areas and secondary conservation areas allows the site designer to move through the site planning process with a thorough knowledge of environmental constraints and opportunities that can help direct development decisions in an environmentally-responsive manner. Potential development areas and house sites are identified to maintain the natural integrity of the site while meeting existing land development requirements and density provisions.[30]

Ideally, primary and secondary conservation areas should be avoided by development. However, primary conservation areas (i.e., wetlands, watercourses, floodplains, and restrictive

soils, slopes and geologic formations) are *must avoid lands*; these areas are sieved out first as they have limitations or are inherently unsuited for development. While Arendt notes that primary conservation areas are the first type of open space drawn on any site plan, secondary conservation areas must be evaluated to determine which of these areas are of "greater and lesser significance" based on their importance, vulnerability or fragility.[31] The selection of secondary conservation areas is perhaps the most critical part of the initial step in the four-step development design process argues Arendt, as it is through the preservation of secondary conservation areas (i.e., lands most sensitive environmentally, most significant historically or culturally, most scenic and/or possessing unusual attributes) that the special features and the natural beauty of a site are afforded protection from development.[32]

The approach to determining lands suitable for development known as "sieve mapping" was founded on the premise that once land has been through all the sieves and all difficult areas for development have been eliminated, the land remaining is considered suitable for the contemplated land use.[33] In essence, as with the delineation of primary and secondary conservation areas, the sieve mapping model argues "against locating uses in particular locations" deemed unsuitable for development.[34] In a similar vein, Ian McHarg, in his seminal work *Design with Nature*, argued that working with the "image of nature as an interacting and living storehouse" we must initiate a program that seeks "to find the highest and best uses of all the land" and identify the "maximum conjunction" of lands and proposed uses.[35] Applied with wisdom, conservation subdivision design is consistent with McHarg's injunction.

View of historic farm site located along the New River

Arendt's approach to creating conservation subdivision designs involves a two-stage process: the background phase and the design phase. The *background (or inventory) phase* involves understanding the locational context of the site, mapping of natural, cultural and historic features, integrating the layers of information from the inventory (using hand-drawn and/or computer-generated overlays), and prioritizing objectives and establishing criteria for rating and choosing lands to be preserved.[36] The next stage is the *design phase* which includes "four sequential steps" at the heart of the design process: identifying all potential conservation areas (the "all important" first step), locating the house sites, designing street alignments and trails, and drawing in the lot lines.[37]

Figure 1 illustrates the application of conservation planning and design principles in the parkway corridor for a 45-acre historic farm site located along the New River. This graphic highlights the differences between conventional and conservation approaches to the design of a subdivision of single family homes. Two development options for the 45-acre parcel are shown in Figure 1 each of which divide the original parcel into two smaller parcels: a 39-acre development parcel where new homes will be built and a smaller six-acre parcel which contains the existing historic

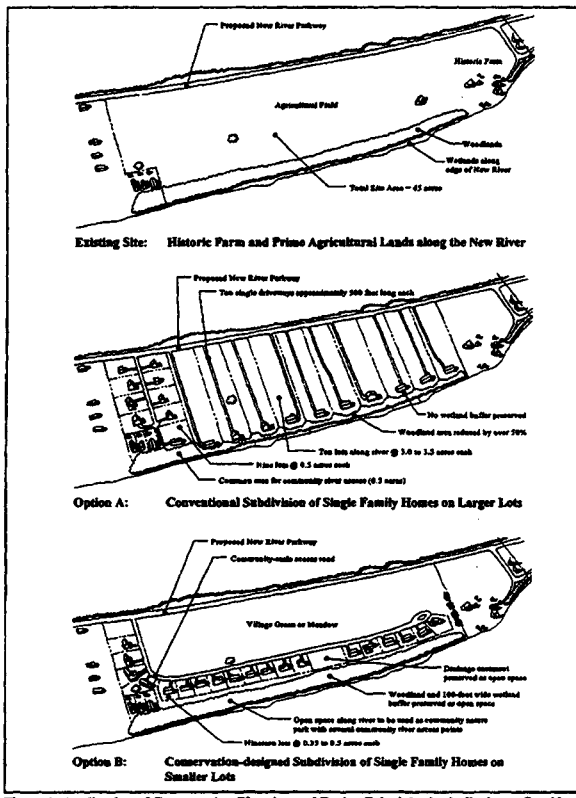

Figure 1: Application of Conservation Planning and Design Principles in the Parkway Corridor

farm and accompanying outbuildings.

Option A shows a subdivision of single family homes with a design based upon a conventional development scheme. Nine half-acre lots are shown on the extreme left side of the drawing to replicate an existing smaller development adjacent to this portion of the site. A larger portion of the site has been divided into ten 3.0- to 3.5-acre lots which extend from the parkway to the river's edge. A small half-acre site has been preserved as community open space for river access purposes while the remaining 38.5 acres of the development parcel has been subdivided into individual development parcels. By developing such a large portion of the site and locating homes in close proximity to the river, over 50 percent of the woodland area has been reduced and no wetland buffer has been provided to aid in water quality maintenance. The use of individual driveways for the ten river lots along with the single entrance to the nine half-acre lots results in a total of 11 additional connection points along the parkway and is contrary to the condition of limited-access necessary for the maintenance of scenic parkway standards.

Option B shows a conservation-designed subdivision of single family homes where 8 acres of the site have been subdivided into 19 lots ranging in size from 0.35 to 0.5 acres while the remaining 31 acres (79 percent) of the 39-acre development parcel have been preserved as community open space. The community open space preserved includes an approximately 21-acre village green or meadow (which could be leased for farming purposes with the proceeds going to the community open space maintenance fund), and an approximately 10-acre nature park along the river which includes woodlands, wetlands and a 100-foot wide wetland protection buffer. An alternative design of Option B utilizing 19 half-acre lots would yield 11 acres of developed land and 28 acres of community open space (72 percent of the 39-acre development parcel) including an 18-acre village green/meadow and a 10-acre nature park along the river.

One of the major benefits of Option B from a scenic parkway perspective is the provision of a single access connection to the parkway rather a series of individual driveways. The community-scale access road used in this example serves 19 lots thus limiting ingress and egress points along the parkway. If existing development

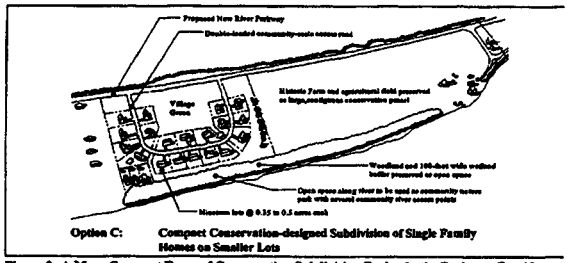

Figure 2: A More Compact Form of Conservation Subdivision Design in the Parkway Corridor

regulations or future conditions necessitate another entrance into the community, an additional permanent or emergency entrance could easily be provided by extending the roadway from the cul-de-sac to the parkway at the end of the site near the historic farm. Ideally, private connections to the scenic parkway will be kept to a minimum to facilitate a safe and pleasurable motoring experience.

Option C (shown in Figure 2) represents a more compact form of a conservation-designed subdivision of single family homes where the development parcel has been reduced to 17 acres while the historic farm parcel has been preserved as one contiguous 28-acre parcel containing the existing historic farm, accompanying buildings and a large portion of the prime agricultural fields. Nine acres of the site have been subdivided into 19 lots ranging in size from 0.35 to 0.5 acres while the remaining 8 acres (48 percent) of the 17-acre development parcel have been preserved as community open space. The community open space includes an approximately three-acre village green or meadow, and four-acre nature park along the river with woodlands, wetlands and a 100-foot wide wetland protection buffer.

It is our judgement that conservation-designed developments will more effectively retain the rural character of the area by protecting natural, cultural and scenic values and functions within the parkway corridor while providing at least the same economic return from the developer as could be secured under a conventional development approach. The application of cluster development principles advocated in conservation subdivision design is an acceptable method of preserving natural cultural and scenic values and functions in the landscape but not necessarily the only way of preserving such values and functions. The current literature on sustainable landscape design, while supporting the basic premise of clustering development on a site to reduce resource impacts, underscores the need to

Table A summarizes the vital development and open space statistics for the three options.

TABLE A - SUMMARY OF DEVELOPMENT OPTIONS			
	Option A	Option B	Option C
TOTAL AREA OF ORIGINAL PARCEL	45 acres	45 acres	45 acres
Total area of historic farm parcel preserved	6 acres	6 acres	28 acres
Total area of development parcel	39 acres	39 acres	17 acres
Total developed area	38.5 acres (9 0.5-acre lots, 10 3.0-3.5-acre lots)	8 acres (19 0.35-0.5-acre lots)	9 acres (19 0.35-0.5-acre lots)
Total community open space area preserved	0.5 acres	31 acres	8 acres
Percent of development parcel preserved as community open space	1%	79%	48%

consider carrying capacity and bioregionalism in establishing a framework for sustainable landscape design. In striving to meet sustainability objectives, such as the protection of ecologically critical areas and the minimization of infrastructure, alternative development strategies including the application of cluster development principles should be considered based on specific site conditions. [38]

Creating an Integrated Network of Protected Open Space Lands

The goal of a conservation-oriented approach to land planning and design is not to simply preserve adjunct pieces of the landscape on disjointed development parcels but to foster the creation of an interconnected, integrated network of open space lands that serves people and sustains natural functions and flows. The connective quality of open space in cluster development was recognized by Whyte as he indicated that a relatively small part of the open space in a community "may be the link that ties many more acres together."[39] Whyte found that the open space within a cluster subdivision might be functional in itself, but would become more functional if connected with open space areas in other developed areas and with schools and parks throughout the larger community through a united open space network.[40]

Arendt notes that "possibly the most important aspect of the development approach known as *conservation subdivision design* is the opportunity it offers to create an interconnected network of protected lands" thus providing "a true fabric of open space that flows among any number of new subdivisions", and contributing to the protection of water quality and wildlife habitat over a larger area.[41] In practice, a series of open space lands can be linked to form a "greenway" which is basically a vegetated corridor used primarily for outdoor recreational activities such as walking, jogging, hiking and biking. However, the formation of greenways is not a haphazard amalgamation of open space lands. Hellmund suggests a four-stage ecological approach to greenway design that includes:

(1) reviewing the region to understand its opportunities and constraints for creating a greenway,
(2) selecting project goals and key uses for the greenway and defining a study swath within the region with good potential for a greenway,
(3) selecting and evaluating alternative alignments for a greenway and then locally setting widths that respond to local ecological conditions and
(4) creating and implementing site designs to locate uses and facilities within the greenway, and preparing and carrying out management plans.[42]

Broader interpretations of greenways held by rural land management professionals and wildlife conservationists go beyond the use of a greenway strictly for recreational activities and include the protection of lands for their value as farmlands, woodlands, sensitive animal habitat and water-pollutant filters.[43] Smith notes that greenways composed of natural vegetation along riparian corridors help maintain water quality by filtering excess nutrients in surface runoff before they reach streams and rivers, by forming a physical barrier on the ground surface which slows surface runoff and reduces erosion, and by aiding in the maintenance of natural stream levels and rates of flow.[44] In addition to helping maintain the quality of water resources, greenways serve a

variety of ecological functions as protectors of natural areas; riparian corridors preserved as greenways are especially important as they support a diversity of valuable ecological sites, including aquatic, riparian and upland habitats.[45]

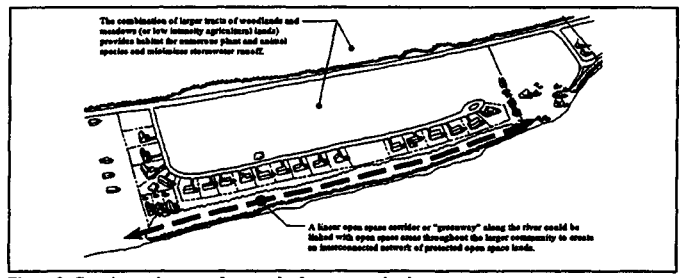

Figure 3: Creating an integrated network of open space lands

Along the New River Parkway, the New River, adjacent wetlands, woodlands and fields, and publically-owned land (including lands within the New River Gorge National River) can be linked with open space lands conserved by the wise planning and design of new subdivisions and developments to create an integrated greenway of protected lands. Figure 3 illustrates the creation of a linear open space corridor or "greenway" within the proposed nature park included in Option B and the possibility of linking the open space lands in Option B with other open space areas throughout the larger community.

Landscape Ecology and Regional/Environmental Planning

Shafer notes that in managing landscapes, we must seek to "protect existing natural landscape connectivity and assemblages" meaning that "effective conservation considers the entire landscape and thus blends into regional planning."[46] Site planning and design must incorporate "a more broad-reaching, landscape ecological approach where the impacts of a particular land use plan or landscape design are considered within the larger, ecological context of the landscape or region."[47] Noting that environmental planning generally applies to planning and management activities in which environmental rather than social, cultural or political factors are the central considerations, Marsh finds that the "goal in environmental planning should be to guide change in such a way as to maintain the long-term performance of the critical processes and systems of the landscape."[48]

Dramstad et al. provide greater clarity for planners and designers by indicating that "better suburban developments" do not obstruct species movements, pollute nearby waterbodies, encourage rapid colonization by invasive plants and animals, nor break up major patches and natural corridors in the landscape.[49] Better developments avoid and/or minimize such adverse impacts by concentrating new development within areas of existing human disturbance and by sensitively locating new development at the edge of natural patches or outside vegetated riparian buffers. Better developments also protect stream and river corridors by maintaining or providing a buffer of vegetation wide enough to control dissolved-substance inputs from developed areas, and they preserve upland animal habitat as a conduit for the movement of upland interior species and a place of refuge for species displaced by flooding.[50]

Priorities about what is significant, critical or irreplaceable need to be established to guide the designation of open space within a site. Obviously, setting such priorities implies the need to look beyond the boundaries of the

site. In applying the science of landscape ecology to the protection of natural areas Forman argues that "in land use decisions it is unethical to evaluate an area in isolation from its surroundings or from its development over time... Ethics impel us to consider an area in its broadest spatial and temporal perspectives."[51] Indeed, ethics require land planners to consider each individual site in its broader environmental context.

SUMMARY

Phil Lewis, eminent landscape architect from the University of Wisconsin, boldly declares the need for a *regional design process*,—a "systematic, flexible, comprehensive approach to analyzing the landscape and guiding human growth to minimize impact on the land" based upon "an ethical foundation that integrates a land ethic with a social ethic."[52] In advocating a landscape ecological approach to land development, as exemplified in the application of conservation planning and design principles within the New River Parkway corridor, the thoughts of Aldo Leopold (herald of the "land ethic") seem especially appropriate. Leopold, known to many as the father of the modern conservation movement, wrote in *A Sand County Almanac*:

> "that land is a community is the basic concept of ecology, but that land is to be loved and respected is an extension of ethics . . . all ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts . . . the land ethic simply enlarges the boundaries of the community to include soils, waters, plants and animals, or collectively, the land."[53]

In celebrating our past and creating our future, we must consider our impact upon the land as though we are inextricably a part of the landscape–for we are. The application of conservation planning and design principles within the New River Parkway corridor, through the advocacy of the conservation subdivision design approach to land development, seeks a balance between human needs for growth and development and nonhuman needs of sustainability and diversity. The preservation of open space lands within developed areas promotes the preservation of sensitive resources, contributes to the maintenance of the scenic and environmental integrity of a site, and functions as an important link to a larger network of connected, integrated open space lands. However, what matters most is not the specific type of land development approach employed but what the consequences of that approach are on the immediate site under study and within the larger, ecological context of the landscape or region. What is essentially sought is a state of harmony between humans, nonhumans and the land.

In the words of Leopold, the "problem we face is the extension of the social conscience from people to land" or the development of a *land ethic* that "reflects the existence of an ecological conscience... a conviction of individual responsibility for the health of the land."[54] Above all, in reference to change in the landscape at any scale and for any purpose, Leopold's words ring loud and clear:

> "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."[55]

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NOTES

[1]Information from American Planning Association, Planning Policies, APA Action Agenda, APA News (in *Planning*), 24B, (July 1979) as quoted by Donald G. Hagman and Julian C. Juergensmeyer in *Urban Planning and Land Development Control Law*, 2nd edition, (St. Paul: West Publishing Company, 1986), p. 25.

[2]Donald G. Hagman and Julian C. Juergensmeyer, *Urban Planning and Land Development Control*, 2nd edition (St. Paul: West Publishing Company, 1986), p. 24.

[3]Samuel N. Stokes, A. Elizabeth Watson, Genevieve P. Keller and J. Timothy Keller, *Saving America's Countryside: A Guide To Rural Conservation* (Baltimore: The John Hopkins University Press, 1989), pp. 134-144.

[4]Land Kendig, *Performance Zoning* (Washington, D.C.: Planners Press, American Planning Association, 1980), p. 3.

[5]Douglas Porter, Patrick Phillips and Terry Lassar, *Flexible Zoning: How It Works* (Washington, D.C.: the Urban Land Institute, 1988), p. 56.

[6]Ibid., p. 82.

[7]Robert D. Yaro, Randall G. Arendt, Harry L. Dodson and Elizabeth A. Brabec, *Dealing with Change in the Connecticut River Valley: A Design Manual for Conservation and Development*, Third Printing (Np: Lincoln Institute of Land Policy and the Environmental Law Foundation, 1989), p. 11. Refer also to Julius Gy. Fabos, *Planning the Total Landscape* (Boulder: Westview Press, 1979).

[8]Ibid., p. 12.

[9]Ibid., pp. 13-14.

[10]William H. Whyte, *Cluster Development* (New York: The American Conservation Association, 1964), p. 12.

[11]Ibid., p. 12.

[12]Randall Arendt, "Open Space Zoning: What It Is and Why It Works," *Planning Commissioners Journal*, Issue 5 (July/August 1992), p. 5.

[13]Michael Mantell, Stephen Harper and Luther Propst, *Creating Successful Communities: A Guidebook To Growth Management Strategies* (Washington, D.C.: Island Press, 1990), p. 181.

[14]Frederick Jarvis, *Site Planning and Community Design for Great Neighborhoods* (Washington, D.C.: Home Builder Press, National Association of Home Builders, 1993), p. 22.

[15]Jeff Lacy, "An Examination of Market Appreciation for Clustered Housing With Permanent Open Space", Department of Landscape Architecture and Regional Planning,

University of Massachusetts (Amherst: Center for Rural Massachusetts, 1990), p. 9.

[16]Edward T. McMahon, "Green Enhances Growth," *Planning Commissioners Journal*, Issue 22 (Spring 1996), p. 5. Research findings based on a 1995 survey conducted for a group of the nation's largest volume homebuilders by American Lives, a San Francisco-based firm as reported by pollster Brook Warrick.

[17]Ibid., p. 5.

[18]Randall Arendt, *Conservation Design for Subdivisions: A Practical Guide To Creating Open Space Networks* (Washington, D.C.: Island Press, 1996), p. 6.

[19]Frederic O. Sargent, Paul Lusk, Jose A. Rivera and Maria Varela, *Rural Environmental Planning For Sustainable Communities* (Washington, D.C.: Island Press, 1991), p. 3.

[20]Ibid., p. 9.

[21]Ibid., p. 9.

[22]Ibid., p. 9.

[23]Ibid., p. 135.

[24]Michael N. Corbett, *A Better Place to Live: New Designs for Tomorrow's Communities* (Emmaus: Rodale Press, 1981), p. 84.

[25]Frederick Steiner, *The Living Landscape: An Ecological Approach to Landscape Planning* (New York: McGraw-Hill, Inc., 1991), pp. 8-9. For an earlier discussion of a framework for the ecological planning approach, see Philip Lewis, "Quality Corridors for Wisconsin," *Landscape Architecture* 54 (2, 1964): 100-107 and Ian McHarg, "Human Ecological Planning at Pennsylvania," *Landscape Planning* 8 (1981): 109-120. For an overview of ecological planning, see Frederick Steiner, Gerald Young and Ervin Zube, "Ecological Planning: Retrospect and Prospect," *Landscape Journal* 7 (1988): 31-39, and George Thompson and Frederick Steiner, *Ecological Design and Planning* (New York: John Wiley & Sons, Inc., 1997).

[26]Arendt (1996), p. 6.

[27]Arendt (1996, 8, 41) states that conservation subdivision design concepts compliment the more formal design approach advocated by the New Urbanism movement and notes, while both rely on more compact neighborhood development, conservation subdivision design promotes more organic lot layouts and loosely configured groups of houses centered on the principle of preservation of natural lands as community open space rather than the more formal streetscapes and street patterns associated with traditional neighborhood development. In summarizing that the more formal designs of the New Urbanism movement are most closely associated with metropolitan corridor locations, new nodes along a regional transportation network or as extensions of traditional historic towns, Arendt (1996, 8, 29) notes that traditional neighborhood developments can be modified to incorporate conservation design concepts and cites an example of a neotraditional village in Chester County, Pennsylvania, which includes numerous commons, greens and playing fields along with an extensive greenbelt of fields, woods and trails. For more information on traditional neighborhood development, see the work of Andres Duany and Elizabeth Plater-Zyberk and their book *Towns and Town-making Principles* (Cambridge: Harvard University Graduate School of Design, 1991). Refer also to Peter Katz, *The New Urbanism: Toward an Architecture of Community* (New York: McGraw-Hill. Inc., 1994) and Sim Van der Ryn and Peter Calthorpe, *Sustainable Communities: A New Design Synthesis for Cities, Suburbs, and Towns* (San Francisco: Sierra Club Books, 1986).

[28]Arendt (1996), p. xix.

[29]Ibid., p. 8.

[30]Ibid., p. 7.

[31]Ibid., p. 39.

[32]Ibid., pp. 41 and 58.

[33]John Tillman Lyle, *Design for Human Ecosystems: Landscape, Land Use, and Natural Resources* (New York: Van Nostrand Reinhold, 1985), p. 244.

[34]Ibid., p. 245.

[35]Ian McHarg, *Design with Nature* (Garden City: The Natural History Press, 1969), p. 128.

[36]Arendt (1996), p. 27.

[37]Ibid., pp. 40-47.

[38]Linda I. Henden, "Evaluating Sustainability of Community Designs" (master's thesis, Virginia Polytechnic Institute and State University, 1996), pp. 22 and 181-183. Henden's research includes an overview of sustainable community designs and an evaluation of seven urban fringe communities.

[39]Whyte (1964), p. 15.

[40]Ibid., p. 78.

[41]Arendt (1996), p. 49.

[42]Paul Cawood Hellmund, "A Method for Ecological Greenway Design," ed. by Daniel S. Smith and Paul Cawood Hellmund (Minneapolis: University of Minnesota Press, 1993), p. 126.

[43]Randall Arendt, Elizabeth A. Brabec, Harry L. Dodson, Christine Reid and Robert D. Yaro, *Rural by Design: Maintaining Small Town Character* (Chicago: American Planning Association, Planners Press, 1994), p. 263.

[44]Daniel S. Smith, "An Overview of Greenways: Their History, Ecological Context, and Specific Functions," *Ecology of Greenways*, ed. by Daniel S. Smith and Paul Cawood Hellmund (Minneapolis: University of Minnesota Press, 1993), p. 13. For more information on greenways, see Charles A. Flink and Robert M. Searns, *Greenways: A Guide to Planning, Design, and Development* (Washington, D.C.: Island Press, 1993).

[45]Ibid., p. 14.

[46]Craig L. Shafer, *Nature Reserves: Island Theory and Conservation Practice* (Washington, D.C.: Smithsonian Institution Press, 1990), p. 107.

[47]Wenche E. Dramstad, James D. Olson and Richard T.T. Forman, *Landscape Ecology Principles in Landscape Architecture and Land-Use Planning* (Washington, D.C.: Harvard University Graduate School of Design, Island Press and the American Society of Landscape Architects, 1996), p. 51. For more information on the application of landscape ecology to planning and design, see Richard T. T. Forman, *Land Mosaics: The Ecology of Landscapes and Regions* (Cambridge: Cambridge University Press, 1995); of particular interest are Chapter 13 Land Planning and Management and Chapter 14 Creating Sustainable Environments.

[48]William M. Marsh, *Landscape Planning: Environmental Applications*, 2nd edition (New York: John Wiley & Sons, Inc., 1991), pp. 3 and 42.

[49]Dramstad et al. (1996), p. 47.

[50]Ibid., p. 51.

[51]Richard T. T. Forman, "The ethics of isolation, the spread of disturbance, and landscape ecology," *Landscape Heterogeneity and Disturbance*, ed. by Monica Goigel Turner (New York: Springer-Verlag, 1987), p. 220.

[52]Philip H. Lewis, Jr., *Tomorrow By Design: A Regional Design Process for Sustainability*, (New York: John Wiley & Sons, Inc., 1996), pp. 23 and 241.

[53]Aldo Leopold, *A Sand County Almanac and Sketches Here and There* (London: Oxford University Press, 1949), pp. viii, 203 and 204.

[54]Ibid., pp. 209 and 221.

[55]Ibid., pp. 224-225.

BIBLIOGRAPHY

Arendt, Randall. "Open Space Zoning: What It Is and Why It Works". *Planning Commissioners Journal* Issue 5, (July/August 1992): 4-8.

_____. *Conservation Design for Subdivisions*. Washington, D.C.: Island Press, 1996.

Arendt, Randall, Elizabeth A. Brabec, Harry L. Dodson, Christine Reid, and Robert D. Yaro. *Rural by Design: Maintaining Small Town Character*. Chicago: American Planning Association, Planners Press, 1994.

Corbett, Michael N. *A Better Place to Live: New Designs for Tomorrow's Communities*. Emmaus, PA: Rodale Press, 1981.

Dramstad, Wenche E., James D. Olson, and Richard T. T. Forman. *Landscape Ecology Principles in Landscape Architecture and Land-Use Planning*. Washington, D.C.: Harvard University Graduate School of Design, Island Press and the American Society of Landscape Architects, 1996.

Forman, Richard T.T. "The ethics of isolation, the spread of disturbance, and landscape ecology." *Landscape Heterogeneity and Disturbance*. Ed. Monica Goigel Turner. New York: Springer-Verlag, 1987.

Hagman, Donald G. and Julian C. Juergensmeyer. *Urban Planning and Land Development Control Law*, 2nd ed. St. Paul: West Publishing Company, 1986.

Hellmund, Paul Cawood. "A Method for Ecological Greenway Design." *Ecology of Greenways*. Ed. Daniel S. Smith and Paul Cawood Hellmund. Minneapolis: University of Minnesota Press, 1993.

Henden, Linda I. "Evaluating Sustainability of Community Designs." Master's thesis, Virginia Polytechnic Institute and State University, 1996.

Jarvis, Frederick D. *Site Planning and Community Design for Great Neighborhoods*. Washington, D.C.: National Association of Home Builders, Home Builders Press, 1993.

Kendig, Lane. *Performance Zoning*. Washington, D.C.: American Planning Association, Planners Press, 1980.

Lacy, Jeff. "An Examination of Market Appreciation for Clustered Housing With Permanent Open Space." Amherst: Center for Rural Massachusetts, 1990.

Leopold, Aldo. *A Sand County Almanac and Sketches Here and There*. London: Oxford University Press, 1949.

Lewis, Philip H., Jr. *Tomorrow By Design: A Regional Design Process for Sustainability*. New York: John Wiley & Sons, Inc., 1996.

Lyle, John Tillman. *Design for Human Ecosystems*. New York: Van Nostrand Reinhold, 1985.

Mantell, Michael A., Stephen F. Harper, and Luther Propst. *Creating Successful Communities*. Washington, D.C.: Island Press, 1990.

Marsh, William M. *Landscape Planning: Environmental Applications*. New York: John Wiley & Sons, Inc., 1991.

McHarg, Ian L. *Design with Nature*. Garden City: The Natural History Press, 1969.

McMahon, Edward T. "Green Enhances Growth." *Planning Commissioners Journal* Issue 22 (Spring 1996): 4-5.

Porter, Douglas R., Patrick L. Phillips, and Terry J. Lassar. *Flexible Zoning: How It Works*. Washington, D.C.: the Urban Land Institute, 1988.

Sargent, Frederick O., Paul Lusk, Jose A. Rivera and Maria Varela. *Rural Environmental Planning For Sustainable Communities*. Washington, D.C.: Island Press, 1991.

Shafer, Craig L. *Nature Reserves: Island Theory and Conservation Practice*. Washington, D.C.: Smithsonian Institution Press, 1990.

Smith, Daniel S. "An Overview of Greenways: Their History, Ecological Context, and Specific Functions." *Ecology of Greenways*. Ed. Daniel S. Smith and Paul Cawood Hellmund. Minneapolis: University of Minnesota Press, 1993.

Steiner, Frederick. *The Living Landscape: An Ecological Approach to Landscape Planning*. New York: McGraw-Hill, Inc., 1991.

Stokes, Samuel N., Elizabeth A. Watson, Genevieve P. Keller, and Timothy J. Keller. *Saving America's Countryside: A Guide To Rural Conservation*. Baltimore: The John Hopkins University Press, 1989.

Whyte, William H. *Cluster Development*. New York: The American Conservation Association, Inc., 1964.

Yaro, Robert D., Randall G. Arendt, Harry L. Dodson and Elizabeth A. Brabec. *Dealing With Change in the Connecticut River Valley: A Design Manual for Conservation and Development*, Third Printing. N.p: Lincoln Institute of Land Policy and the Environmental Law Foundation, 1989.

Blue Ridge Parkway

Slicing Through America's Heritage

Peter Givens, Blue Ridge Parkway, Vinton, VA

Heritage corridors - what we are spending time discussing and thinking about this week - suggest "connectedness", the linking of towns and communities, along with their stories and their environments. Heritage corridors are defined as settled landscapes and places where the land has shaped traditions and the cultural values of the people who live there. These areas encourage both the protection of a wide variety of economic, scenic, and cultural resources and sustainable development for tourism and other economic opportunities. In these places, visitors are educated about a community's history, traditions, and environment. (1)

This is the basic definition of a heritage corridor. For those residents of the southern Appalachians, it is almost impossible to read those words without thinking of the Blue Ridge Parkway. A settled landscape... shaping the lives of residents... a land reflecting the culture of the people... protecting a wide variety of resources and traditions. These are phrases that fit the Parkway like a glove. Former planners and superintendents spoke of "integrating the Parkway into the local scene of the highlands" and indicated that the relationship of this park to the region was the "most critical factor" for the future planning and management. (2) The Parkway's "one reason for existence" according to its original landscape architect Stanley W. Abbott, was to reveal "the native American countryside."(3)

What better way to reveal the countryside of the Appalachians... or the variety... or the "connectedness"...or the heritage of the people...than with a graceful mountain parkway? National Park Service guidelines clearly state that any park road should "lay lightly on the ground... and maintain a sense of intimacy with the country through which it travels." (4) Management Policies for the agency stipulate that roads must be "harmoniously related to the landscape." (5) These standards apply to all park roads, and parkways are much more than just park roads. They play a unique role in a park's interpretive efforts, as one study has suggested, by moving visitors "through actual as well as symbolic time and through real cultural space." (6)

At the time of its construction, the Blue Ridge Parkway was the longest road ever planned as a single unit in America. (7) Today, this special place is, by anyone's definition, the kind of connector, link, or corridor - that we are discussing this week. It is perhaps the finest example to be found anywhere and the variety of park stories and resources here is remarkable. When the Parkway was just an idea - before a shovel full of dirt had been turned or one rock carefully placed at a bridge or culvert - an important factor was already established. It would naturally run along the mountains, aligned north to south. This alignment in many ways determines the diversity of the park and the multitude of heritage stories that are interpreted here today. So much of America's cultural and natural history follows an east-west path. Settlement patterns, the lay of the mountains, river drainage patterns, and our tendency as a country in our formative years to "look west", all contribute to this Parkway slicing through and across a multitude

of stories associated with the natural and cultural heritage of our region and our nation. Simply because of this north-south orientation, the Blue Ridge Parkway becomes a corridor of protection that captures vignettes of a wide variety of America's great stories. We start to understand the diversity and variety of resources along the Parkway by looking at the hundreds of "overlooks", where, many times the stories and resources are protected.

Obviously, we think of Daniel Boone, the "vanguard" of the surge of settlers across the mountains beginning in the mid 18th century. Here is "someone whose life would come to symbolize the western movement." (8) His many ventures west from the North Carolina Piedmont took him across this corridor that we know as the Parkway.

Another westward-looking American with Blue Ridge ties was our nation's third president. Thomas Jefferson's vision of America caused him to spend a great deal of his life looking west from his "Little Mountain" near Charlottesville, Virginia. His father's detailed map of the Blue Ridge is one of the earliest and finest. Jefferson spent time at Rockfish Gap taverns discussing his plan for a university, and, in his only published book, *Notes on the State of Virginia*, he detailed many of his natural and cultural observations and curiosities on the Blue Ridge. In that work, Jefferson speculated that "the mountains of the Blue Ridge, and these the Peaks of Otter, are thought to be of a greater height...than any other in our country, and perhaps in North America." (9)

A special collections exhibit at the University of Virginia this spring made the case that "before Camp David, before Martha's Vineyard, before Kennebunkport, there was the Blue Ridge, the backyard of presidents." (10) Eight U.S. Presidents claimed Virginia as their birthplace. In addition, Theodore and Franklin Roosevelt, along with Herbert Hoover, all chose the western reaches of the Commonwealth of Virginia for at least occasional, if not frequent, vacations from the capitol. George Washington made his first trip across the Blue Ridge in 1748 at age 16 with a survey party, recalling many devoted hours to "examining the trees and the soil... and admiring... the richness of the land." (11) James Madison, in addressing an Agricultural Society located in a Blue Ridge county, noted the "errors in our husbandry" that needed correction, including a very contemporary topic to environmental agencies today, the destruction of woodlands. (12) These are stories that we can legitimately preserve Parkway locations.

During the American Revolution and the War Between the States, the east-west migration of troops through mountain passes played a significant role. The Overmountain Men from Upper East Tennessee and Southwest Virginia crossed the Blue Ridge headed for a significant battle at Kings Mountain late in the American Revolution. General George Stoneman's raid through Western North Carolina left earthworks that can still be seen at Deep Gap, and troops crossed the Blue Ridge near the Peaks of Otter, maneuvering around Lynchburg, considered a major strategic location. Douglas S. Freeman, in *Lee's Lieutenants*, notes that prior to the spring of 1861, the geography of Virginia was almost always described in terms of wide streams, blue mountains, and valleys of abundance. "Overnight," he observes, "geography had a new meaning." (13)

On "his first real vacation since the war", Robert E. Lee, along with his daughter Mildred, left Lexington,

Virginia in 1867 for a five day trip in the mountains. Lee was on Traveler and Mildred rode Lucy Long, a "second string war horse" of her fathers, and they made their way to the Peaks of Otter, spending the night at the foot of the mountain, and riding up the next morning. Mildred recalled that her father sat for a long time on a great rock on the summit of Sharp Top, "gazing down at the glorious prospect beneath." (14) The body of General Lee's friend and fellow soldier, Thomas J. "Stonewall" Jackson, was transported up the James River, headed for burial in Lexington, Virginia. That portion of the James and the associated locks and canals are part of the Blue Ridge Parkway today.

Frederick Jackson Turner's Frontier Hypothesis, though dated, influences our understanding and interpretation of early Blue Ridge settlement. When Turner speaks of "innovation, adaptation, and invention" characterizing each new frontier settlement, along with the continuous pattern of venturing west to "begin over again," there is at least some relevance to the stories we tell and preserve about early Blue Ridge settlement patterns. (15)

The stories of natural history in the Blue Ridge are just as important, and sometimes even follow the same east-west pattern. Mountain passes provide a convenient crossing for a variety of wildlife. "Water Gaps" where the James, Roanoke, Linville, Swannanoa, and French Broad cross the park provide a wealth of cultural and natural history stories and resources protected for the visiting public along the Blue Ridge Parkway.

In the area of natural history, the Parkway is widely known, having 1,200 types of identified vascular plants, twenty-five rare or endangered plants and a number of rare or endangered animals. Twelve types of mature deciduous forests exist in the park, along with Canadian vegetation types at higher elevations. One hundred ten miles of streams and thirteen lakes also dot the landscape. Heathbalds and mountain bogs offer unique areas of resource management and interpretive opportunities. This variety of natural features is tied most closely to elevation with ranges from 600-6,000 feet, but the north-south orientation spanning five hundred miles is also a significant factor in creating one of the most diverse units of the National Park System.

We could just as easily discuss the linking of areas where music and crafts dominate the story. The history of the early European settlers in the Blue Ridge is perhaps best told by their performing arts rather than by their material arts. The Southern Highlands Craft Guild and the newly forming group of Virginia Artisans are connected in their efforts by the corridor that is the Blue Ridge Parkway. Along the Parkway corridor, we also find the tremendous heritage of traditional string band music. One writer has noted that the Blue Ridge counties between Roanoke and Asheville "dwarf any other area of the nation with their output of historical musical art." The thread that ties all of these together into a "singularly neat package" is the Blue Ridge Parkway. (16)

Obviously by now, the point is made... what a tremendous collection of resources and stories tied together by the park, and tied to the land and to the communities, and tied together as a great heritage corridor. The Parkway's earliest designers, planners, and dreamers were probably unfamiliar with the term we are using this week at our conference - heritage corridors. We will not find it in documents of the 1930s and 1940s, but the idea was there. "The

charm and delight of the Blue Ridge Parkway", Stan Abbott is quoted as saying "lies in its ever changing location, in variety." Let the road "reveal the countryside".... "integrate" it into the local scene. Finding points of interest - whether scenic, cultural or natural - that would please the visitor was always a top design priority. One study from a Linear Parks Conference several years ago, suggests that the engineers and planners keenly understood that "awesome panoramas" can get tedious. Visitors can get "gorged on scenery." (17) So they patiently and consistently went about the business of designing variety into the park design. Follow a mountain stream, climb up on the slope of a hillside pasture, dip into the open bottomlands, and back into the woodlands. Linking these experiences was foremost in their minds.

What this variety and "connectedness" means to us today, I think, is reminding us of the necessity of thinking regionally and broadly in the management of this place. We find ourselves on the Parkway working with a multitude of groups, agencies, and organizations, each with an interest in their story that surfaces on the Parkway. Our "partners" are as varied as our resources and the stories that go along with them. The Cherokee nation has an interest in the Parkway for obvious reasons, and so do four national forests and the Appalachian Trail Conference. The folks in Floyd and Patrick Counties, Virginia are passionate about "their" Mabry Mill - and rightfully so - but so are the folks in Spruce Pine about "their" Museum of North Carolina Minerals. The Wilderness Road Museum and the Overmountain Victory Trail Association have "claims" on Parkway related resources and stories. The point is that multiple resources bring to the forefront multiple partners with the park. These partners represent communities, and when you link hundreds of communities in twenty nine counties by way of a long, linear park, you have created a heritage corridor!

Looking back at our earlier definition, the Parkway is, in every sense of the word, a settled landscape that tells the story of residents both past and present. The land here has shaped the traditions and cultural values of the people who have lived here... or perhaps those who just passed through. Thinking broadly about protection and regional heritage along the Parkway corridor, we begin to see the land, to quote Aldo Leopold, as a "community to which we belong", not as a "commodity belonging to us." (18) It is then that we use the land and plan the landscape with the respect that we should.

As this National Park Service site fulfills its mandate to "preserve and protect for the enjoyment of future generations," it is both natural and necessary for park managers now and in the future to think in terms of heritage corridors. Working with a variety of communities, professional disciplines, universities, or protection oriented organizations, there is no better place than the Blue Ridge Parkway to care for and interpret these widely diverse stories that are ours to cherish.

BIBLIOGRAPHY

Abbott, Stanley. Interview by Herb Evison 1958. Blue Ridge Parkway Collection, Vinton, Va.

Billington, Ray A. *Westward Expansion - A History of the American Frontier.* New York: McMillian Co, 1967.

"Blue Ridge Heritage Corridor Fact Sheet". National Park Service.

Buxon, Barry and Beatty, Steve, eds. *Blue Ridge Parkway: Agent of Transition.* Boone: Appalachian Consortium Press, 1986.

Bright, John. "The Blue Ridge Parkway - A Catalyst For Environmental Design". Paper presented at the Linear Parks Conference, 1987.

Elliott, Lawrence. *The Long Hunter - A New Life of Daniel Boone.* New York: Readers Digest Press, 1976.

"A Facility to Commemorate the Traditional Music of the Blue Ridge Mountains". National Park Service Concept Paper, undated. Blue Ridge Parkway Collection, Vinton, Va.

Firth, Ian. "The Blue Ridge Parkway Historic Resource Study". Blue Ridge Parkway Collection, Vinton, Va., June, 1992.

Flexner, James Thomas. *Washington: The Indispensable Man.* Boston: Little, Brown, and Company, 1969.

Flood, Charles Bracelen. *Lee, The Last Years.* Boston: Houghton Mifflin, 1981.

Freeman, Douglas S. *George Washington - A Biography.* New York: Scribners, 1948.

Freeman, Douglas S. *Lee's Lieutenants.* New York: Scribners, 1942.

Jefferson, Thomas. *Notes On the State of Virginia.* New York: Harper and Row, 1964.

Kercheval, Samuel. *History of the Valley of Virginia.* Woodstock, Tn: John Gatewood printer, 1853.

Leopold, Aldo. *A Sand County Almanac.* New York: Random House, Inc., originally published 1949.

Liles, Granville. *The Blue Ridge Parkway: A Unique Part of Rural America.* Boone, NC: Appalachian Consortium Press, 1980.

Lyons, Eugene. *Herbert Hoover - A Biography.* Garden City, NY: Doubleday and Company, 1964.

Management Policies, United States Department of the Interior, National Park Service, 1988.

Morgan, Ted. *FDR: A Biography.* New York: Simon and Schuster, 1985.

Parkways: Past, Present, and Future. Boone, NC: Appalachian Consortium Press, 1989.

Philippon, Daniel J. *Landmarks of American Nature Writing From Virginia's Blue Ridge Mountains and Shenandoah Valley.* Charlottesville, VA: University of Virginia Special Collections, 1997.

Speer, Jean H. "Hillbilly Sold Here: Appalachian Folk Culture and Parkway Tourism". Paper presented at Linear Parks Conference, 1987.

Jolley, Harley. *The Blue Ridge Parkway.* Knoxville, TN: University of Tennessee Press, 1969.

NOTES

1 "Blue Ridge Parkway Heritage Corridor Fact Sheet", page 1.

2 Granville Liles. *The Blue Ridge Parkway: A Unique Part of Rural America* (Boone: Appalachian Consortium Press, 1980), p.1.

3 Stanley Abbott. Interview by Herb Evison, 1958, Blue Ridge Parkway Collection, Vinton, Va., p. 3.

4 John Bright, "The Blue Ridge Parkway, A Catalyst For Environmental Design Innovation" in *Blue Ridge Parkway: Agent of Transition* (Boone, NC: Appalachian Consortium Press, 1989), p. 57.

5 Management Policies, US Department of the Interior, National Park Service, December 1988, p. 9:8.

6 Jean H. Speer, "Hillbilly Sold Here: Appalachian Folk Culture and Parkway Tourism" in *Parkways Past, Present, and Future* (Boone: Appalachian Consortium Press, 1986), p. 216.

7 Ian Firth, "The Blue Ridge Parkway Historic Resource Study", June 1992, Blue Ridge Parkway Collection, Vinton, Va., p. 40.

8 Lawrence Elliott, *The Long Hunter - A New Life of Daniel Boone* (New York: Readers Digest Press, 1976), p. 54.

9 Thomas Jefferson, *Notes on the State of Virginia* (New York: Harper and Row, 1964), p. 17.

10 Daniel J. Philippon, *Landmarks of American Nature Writing from Virginia's Blue Ridge Mountains and Shenandoah Valley* (Charlottesville: University of Virginia Special Collections, 1997), p. 3.

11 Douglas S. Freeman, *George Washington - A Biography* (New York: Charles Scribners Sons, 1948), p. 213.

12 Philippon, p. 4.

13 Douglas S. Freeman, *Lee's Lieutenants* (New York: Charles Scribners Sons, 1942), p. 677.

14 Charles B. Flood, *Lee, the Last Years* (Boston: Houghton Mifflin, 1981), pp. 157-158.

15 Ray Billington, *Westward Expansion. A History of the American Frontier* (New York: McMillian Company, 1967), p. 2.

16 "A Facility to Commemorate the Traditional Music of the Blue Ridge Mountains", undated National Park Service Concept Paper, Blue Ridge Parkway Collection, Vinton, Va., pp. 4.

17 Stanley Abbott. Interview by Herb Evison, 1958, Blue Ridge Parkway Collection, Vinton, Va., p. 12-13.

18 Aldo Leopold, *A Sand County Almanac* (New York: Random House, Inc., originally published 1949), p. xix.

Waves of Grain - Waves of Change

Silos & Smokestacks–Interpreting our Agricultural Heritage

Submitted by: Daniel L. McDonald, Ed.D., University of Northern Iowa, Cedar Falls, IA

Located in northeast Iowa, the Silos & Smokestacks (S&S) project is a network of historical sites and experiences providing opportunities for interpreting our agricultural heritage. S&S is a private not-for-profit partnership dedicated to celebrating northeast Iowa's agricultural heritage. This project began as a homegrown, grass roots community partnership in 1991. Today, it has evolved to include the United States Department of Agriculture, the National Park Service, private foundations, state, regional and local governmental agencies, not-for-profit institutions and corporate organizations.

With the National Park Service designation of S&S as a National Heritage Park in 1996, the project and the region has been identified as "the place" to interpret the significance of these historical agricultural developments. Telling the story of America's agricultural heritage is a vast undertaking. The attraction mix necessary for this interpretation includes villages where the first settlers lived, the first vertical meat processing plant, historical museums, exhibits on animal husbandry, soil, seed and "pharming' research stations, the largest tractor factory in the world, the original railroad station used to transport farm products to national and international destinations, demonstration farms, and century farms. Historical remnants of this legacy are scattered throughout the region and are united under one theme "Americas agricultural miracle". Each story represents an important patch of our agricultural heritage quilt. Each patch provides an interpretive opportunity concerning farming, factories, science or lifestyles. These attractions will entertain and educate people about how their food gets from the field to the table. Woven together they'll tell the story of the heartland contributions to the agrarian, industrial and technological revolutions that have changed the way the world is fed. Jointly marketed, they become a destination attraction encouraging tourists to stay overnight, eat in the restaurants, shop in the stores, purchases souvenirs, crafts, antiques and increase secondary transactions associated with the tourism industry.

Two recent studies concerning the viability of the S&S project lend credibility to its potential. This research indicates that 600,000 new visitors can be attracted to agricultural heritage tourism sites and experiences in Iowa. This translates to $66 million in new tourism expenditures, 1,100 jobs with a payroll of $12 million and $4.9 million in new state and local tax revenues. Recent shifts in tourism paradigms also provide a basis for anticipating positive results from the S&S project. Emerging trends of user group characteristics including demographic, lifestyle and psychographic variables of the niche market user group would add additional rational for optimism.

As well as the obvious economic diversification and development opportunities associated with the S&S project, additional benefits would include: the preservation of historic sites and

landmarks for future generational use, auxiliary community development programs, increased citizen awareness and appreciation of Americas historic impact on our global society, and enhanced knowledge concerning our present ability and responsibilities associated with providing food for the global community.

Dr. Dan McDonald is an advisor of the University of Northern Iowa (UNI) Tourism Certificate Program. He was instrumental in the development, delivery and management of this program of study. Since its inception 1994, 216 students representing 16 academic majors have entered this sequence of courses. Among the courses taught by Dr. McDonald are Principles of Tourism, Eco Tourism Development, Rural Tourism Development and Festival and Event Management. Dan serves as liaison and committee member for the Silos & Smokestacks project. He was a founding member of the Midwest Festival and Event Association and presently severs on it's board of directors. He provides technical assistance to rural communities as a certified member of TEAM IOWA, an Iowa Division of Tourism program. As a member of the Iowa Heritage Tourism Advisory Committee, he has assisted Iowa communities in the development of historic attractions. He served as guest editor and author in the "Changing Faces of Tourism" 1996 summer issue of TRENDS, a publication of the National Park Service and the National Park and Recreation Association.

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The Blue Ridge Parkway Corridor Protection Project:

A Status Report to the 1997 Linear Parks Conference by the CONSERVATION TRUST FOR NORTH CAROLINA

Charles E. Roe, Executive Director, Conservation Trust for North Carolina, Raleigh, NC

This may be considered the "first annual report" on the progress of the Blue Ridge Parkway corridor protection project in North Carolina. That project began in 1996 as one of the initiatives and recommendations of the state's "Year of the Mountains" Commission. The Governor's appointed Commission, chaired by Hugh Morton, had turned to the private, non-profit Conservation Trust for North Carolina (CTNC) for help to carry out its mission to promote "quality growth and natural resources protection" in western North Carolina. Furthermore, the Commission and administrators for the Blue Ridge Parkway requested that CTNC take the lead in serving as the primary private land trust for protecting more of the Parkway's scenic and natural corridor in North Carolina. CTNC would use donations from the Commission's inaugurated "Preservers of the Parkway" public fundraising campaign to acquire critical tracts of land along the most popular scenic parkway in the Nation.

Many of the natural and scenic vistas along the 270 miles of the Blue Ridge Parkway are threatened by encroaching development. The popularity and resulting economic benefits of the Parkway are at risk because of incompatible commercial and residential development on adjacent lands. Along the Parkway, the National Park Service owns a right-of-way that averages only 800 feet wide, and is even narrower in some sections. The Parkway attracts more visitors than any other park unit in the entire National Parks System, and those visitors generate nearly $2 billion annually for the regional economy. But the National Park Service has had very little federal appropriated funds to buy additional Parkway land for many years.

The Conservation Trust for North Carolina is a nonprofit, private corporation founded five years ago to help save more of our state's most important natural and rural heritage resources. Distinct from national environmental organizations with specific agendas, the Conservation Trust helps North Carolina communities, landowners, private land trusts, and public agencies protect and conserve those natural and rural land resources of greatest value to them.

The Conservation Trust "inherited" the fundraising campaign begun last year by the Governor's appointed "Year of the Mountains Commission." The success of this project depends upon donations from private contributors. A lead gift of $50,000 was donated directly by the Stanback family to the National Park Service to buy several tracts in the Linville Falls vicinity. Since then another $200,000 has been raised from several hundred donors to purchase land and conservation easements (development rights) from willing sellers. Most recently a private donor has made a one million dollar challenge grant to support the project. Contributors of $500 or more receive a handsome certificate of recognition signed by Governor Hunt. The IRS and the State recognize donations for this project as tax-deductible.

The new Blue Ridge Parkway Foundation, established only a few months ago, is now a partner in raising more funds to help the Parkway accomplish its program priorities and to ensure protection of its natural beauty.

Asheville Watershed Easement. The first success of the project was acheived a year ago with a permanent conservation easement over the entire 17,395-acre Asheville Watershed (consisting of largely old-growth forests in the North Fork and Bee Tree basins on the Blue Ridge Escarpment, from the vicinity of Mount Mitchell to well south of the Craggy Mountains, and including about 15 miles of the Blue Ridge Parkway). That easement was donated by the City of Asheville to the Conservation Trust and guarantees that the land will always be protected for water quality and preservation of natural resources. No timber cutting is allowed above the 3600 foot elevation. The land may not be subdivided or developed. It can only be used for public water supply or for parkland. Since accepting the Asheville Watershed easement, the Conservation Trust has been discussing potential conservation easements over other large watershed areas below the Parkway with their public and private owners.

Public Appropriations. The first Congressional appropriation of substantial size in many years was arranged last fall, principally by Senator Jesse Helms upon request by the Year of the Mountains Commission chair. The National Park Service was allocated $750,000 specifically to purchase conservation easements on privately-owned lands adjacent to the Parkway in North Carolina. But to date none of those appropriations have been spent.

Governor James Hunt, responding to a request by the Year of the Mountains Commission, asked the state General Assembly to appropriate $2 million for land and easement acquisitions along the Parkway as part of his 1997-98 biennium budget request. The legislature has taken no action on the request.

The Year of the Mountains Commission also recommended that the NC Department of Transportation allocate at least $5 million from its share of federal ISTEA "transportation enhancement" funds (dollars that are supposed to be used for greenways, bicycle lanes, scenic roadway protection, etc.) over five years to acquire critical lands in the Parkway corridor. DOT in its 1998-2004 Transportation Improvement Plan committed to spend $1.2 over four years (or $300,000 annually) to acquire scenic viewshed lands adjoining the Parkway, but to date no tracts have yet been acquired.

Red Bank Cove Acquisition. The Conservation Trust in the first weeks of 1997 completed its first land purchase along the Parkway, using about $55,000 of the "Preservers of the Parkway" donations, to purchase a 22-acre tract of beautiful hardwood cove forest near Wesner Bald, Balsam Gap, and US Highway 74 in Haywood County. The Red Bank Cove tract was sold by its owners for the appraised fair market value. Purchase blocked the possibility of residential construction or timber cutting next to the Parkway. The land is part of a natural area rated as having "statewide ecological significance" by the NC Natural Heritage Program. The Conservation Trust will donate this land for addition to the Parkway.

GrandView Overlook Easement. The donation in April, 1997, of a permanent conservation easement over 234 acres beneath the Parkway's "GrandView Overlook" in Watauga County was the first accomplishment of the Conservation Trust's discussions with private

landowners who love the Parkway and are interested in the tax-reducing incentives for donating land or easements for conservation purposes. The easement given by Sterling Carroll, president of Carroll Leather Goods Company, preserves the forested slopes below the Parkway's popular "GrandView" overlook near Deep Gap and close to the Parkway Elementary School on Highway 421 (east of Boone). Mr. Carroll wanted to place the permanent restrictions on the property to "help preserve the natural and scenic beauty of the Parkway, and to encourage other private landowners in the area to do the same."

Conservation easements should be an effective way to protect more natural and rural landscapes on privately-owned properties along the Parkway. Easements can earn property owners substantial reductions in federal and state income, estate and inheritance taxes.

Critcher Farm Purchase. Using the remainder of the "Preservers of the Parkway" donated dollars, and a generous low-interest loan from Wachovia Bank, the Conservation Trust last week completed the purchase of a 47-acre farm next to the Parkway, near Bamboo Gap, between Boone and Blowing Rock in Watauga County. The purchase blocks the potential residential subdivision or commercial development of this highly visible farmland. The Critcher Family accepted a purchase price slightly below the appraised value for potential development. The Conservation Trust expects to be partially reimbursed by the National Park Service for the purchase price and will convey a permanent conservation easement that restricts future development to a single home site and barn. We will sell the land to a buyer willing to live with those use restrictions. The scenic rural character of this section of the Parkway corridor will be preserved.

Other Land Trusts Join the Project. While the Conservation Trust serves as the "Blue Ridge Parkway Land Trust," it also has reached out to several local land trusts to be partners in protecting the natural and cultural heritage of the Blue Ridge corridor. Already conservation easements on private properties next to the Parkway have been acquired by the Southern Appalachian Highlands Conservancy and the new Western Virginia Land Trust. The Nature Conservancy holds a 2000-acre conservation easement over much of Grandfather Mountain donated by Hugh Morton, and TNC has recently purchased large tracts near Waterrock Knob in the Plott Balsams.

Magnificient Challenge Gift. A few days ago the Stanback family of Salisbury offered a $1 million donation to the Conservation Trust for the Parkway project. The grant will enable us to hire project staff, design a long-range protection plan, and expand our efforts to protect other tracts along the Parkway. The grant will be targeted to arrange acquisitions of more conservation easements and purchases of threatened properties, purposely scattered along the length of the Parkway. The Stanback's "challenge" donation is intended to motivate others to increase their giving for the protection of the Blue Ridge Parkway.

Thus, we hope this is the first of a long-term series of reports on the progress of this project. We know that we will not be able to prevent all damaging development in the Parkway corridor, but we expect to make dramatic gains in saving many of the Parkway's most beautiful views and environmentally important resource areas.

Transfrontier Conservation Areas (TFCAS)-

Creating Opportunities for Cooperation

Jay Singh, University of Washington, Seattle, WA

Can conservation and protection of land and biodiversity create economic opportunities as well as open channels for peaceful cooperation? This debate, although in its infancy, has drawn in a number of NGOS, private citizens and government agencies to the fore who are in favor of establishing international parks between neighboring nations as a means of regional economic growth and development. My research, also in its infancy, deals with the prospects of creating such parks. Most specifically, I aim to analyze the socioeconomic incentives for creating TFCAs and the resulting management regime if a successful partnership is established. This paper will present initial -findings of the four levels of international cooperation between neighboring states and present the opportunities and constraints. As I am in the early stages of my research, I would appreciate comments and suggestions from the audience.

INTRODUCTION TO TFCAS

- What are TFCAS?

- Parks or nature preserves that cross international boundaries
- Historical backgound
- Examples in
    - Europe & the US
    - South America
    - South Asia
    - Africa

• **Definition of TFCAS:** As the term suggests, transfrontier conservation areas (TFCAs) are natural parks, preserves or related areas that have been divided by international boundaries. "TFCAs are relatively large areas, which straddle frontiers between two or more countries and cover large-scale natural systems encompassing one or more protected areas. These are areas where human and animal populations have traditionally migrated across or straddled present political boundaries." (GEF, 1996)

• **Historical perspective:** Historically national boundaries all the over the world have gone through numerous iterations fragmenting natural areas. International natural areas that once were a single unit are managed separately under diverse and at times opposing national resource objectives. "Parks continue to be designated by boundaries that fail to encompass the habitat required to sustain complete faunal assemblages. Few tracts of land are currently available that encompass entire ecosystems. As a result, most parks are artificial biotic areas inextricably linked to natural and human activities outside their boundaries (Machlis-Tichnell, 1985).

- "In 1872 when the world's first National Park (Yellowstone) was established, there were 95 countries in the world. Today there are over 174. That is a lot of changing of borders. In fact much more recently - between 1972 and 1982 - there were 70 boundary changes." (Odegaard in Tborsell, et al, 1990)

• **Examples of TFCAS:** The first TFCAs were created by Poland and Czechoslovakia in 1928 with the Krakow Protocol which created three such parks. Directors of the parks collaborate on various issues especially those concerning tourism and research.

- US and Canada created N. America's first TFCA in 1932 by formally linking Glacier National park to the Waterton Lakes in Canada.
- e.g. of Gran Paradisio in Italy - Ibex protected in winter but they go to France (Vanoise) in summer - in 1972 joint program w/France.
- La Ruta Maya - Mexico, Guatemala, Belize arid Honduras.
- Nepal/Tibet.
- There are at present 70-75 possible TFCAs in over 65 nations worldwide.

• Potential Benefits of TFCAs

ECOLOGICAL
- re-establish traditional seasonal migration routes of species
- reduce pressures on existing national parks
- increase the sizes of areas to maintain larger populations of species and create larger gene pools
- encompass entire watersheds to be able to effectively manage the system

- Improving protection of internationally shared resources
- Increase the sizes of areas to maintain larger populations of species, reduce chances of extinction due to random fluctuations and local disease transmissions, etc.
- Establish or reestablish seasonal migration possibilities. In tropics and subtropics in response to seasonal changes in rainfall.
- Encompass entire watersheds to be able to control pollution and manage the system better.
- Avoid inbreeding depression in small populations.
- Reduce gaps between reserves to facilitate movement of organisms.
- Increase range of habitat types within reserves.
- Reduce transnational pollutants

CULTURAL - preserving common heritage

SOCIO-ECONOMIC
- direct value for non-consumptive use
- consumptive use of wildlife and plants
- regional transfer of technology and expertise
- capacity building (management opportunities)

POLITICAL - REGIONAL COOPERATION
- Reduce border tensions and stress
- Contribute to regional economic development

- Before creating any TFCA, community involvement should be a necessary condition. As this will ensure long-term sustainabihty and provide benefits where it is most - at the local community level.
- **Cultural:** - preservation of heritage of indigenous peoples
- e.g Masai in Kenya and Tanzania (Serengeti NP and Kenya's Masai Mara game reserve), Inuit across the Bering strait
- La Ruta Maya - ecocultural tourism between Mexico, Guatemala, Belize and Honduras in the Maya Regiori
- **Socio-economic incentive** - Expansion of conservation as a sustainable means of income generation. KEY POINT - CONSERVATION DOES NOT ELIMINATE FUTURE USES.
- Direct non-consumptive use - ecotourism, game viewing - high potential for income generation - ecotourism creates foreign exchange - Kenya in 1984 = $240 m, Costa Rica ecotourism generated second most income after coffee. In Nepal in the Mt. Everest area - 90% of area's

income comes from tourism. Richer opportunities for expanded ecotourism - better able to distribute tourists to achieve high quality "experiences" even if total numbers of tourists increase *TO TOURISM IS THE SECOND LARGEST INCOME GENERATOR AFTER OIL. (GEF)*

- Consumptive use - medicinal herbs, plants, food - most Africans get their proteins from wildlife, "T.A. Molayan estimates that 50 percent of the population in Africa south of the Sahara depends on wildlife for a source of protein" (MacWis-Tichnell 1985)
- Expanded opportunities for involving local people and generating economic benefits from the existence of the park
- Transfer of technology & expertise- example of Makalu-Burun/ Quomolongnia NP. The Chinese govt. approached Nepalese govt. to learn latest methods in park management especially in Tibet along the border where the residents in both parks shared same heritage. This has led to a transfer of technology and and expertise and confidence building between Tibet (China) and Nepal.
- **Management opportunities potentially created** - Save administrative and maintenance costs by achieving economics of scale, etc. Better opportunities for controlled experimentation.
- **Political** - TFCAs are also known as peace parks as one of their major objective is to stimulate international cooperation in resource management.
- Share in economic gains and growth through tourism and contribute to regional growth.
- "They [peace parks] can have strategic value in preserving natural areas and promoting coordinated management of shared resources.
- 4 levels of TFCA management regimes which can facilitate regional friendship. Good relations - become better, cool relationships become warmer, aftermath of war - rebuild confidence; and, in conflicts create DMZ (McNeil in Thorsell, et al, 1990)
- **1st Level:** In cases where countries have warm relations, potential for creating TFCAs is excellent. Also if the economic conditions in both countries are similar the chances are brighter. The resulting TFCA could be solidified formally through a treaty or informally through corresponding resource controlling agencies. This may break down between countries with differing economic condition and warm relations. The potential however does exist to control illegal immigration and other adverse effects if a formal agreement is signed and monitored by both countries. Two initiatives along US/Canadian border and Gulf of Maine/Atlantic Ocean - 1. Acadia to Fundy NP 2. Cape Cod National Seashore to eastern shore of Nova Scotia.
- **2nd level:** In cases where countries share cool albeit peaceful relations, the potential exists to further warm the relationship by creating an opportunity to manage large ecosystems and share the benefits. However, issues of sovereignty may not allow co-management. Here the potential for manage the area complimentary maybe an effective recourse. In complementary regimes the park agencies through informal consensus agree to mimic each others management methods. This could lead to improved relations and possible co-management.
- **3rd Levd:** After a major conflict,

Level of TFCA	Level of Political Warmth	Possible Regime	Example
1st Level	Warm/Hot	Co-mgt. (informal/formal)	Glacier/ Waterton
2nd Level	Cool/Peaceful	Complementary Mgt.	Nepal/Tibet
3rd Level	Post-war	Co-mgt. (informal/ formal)	A no. of European parks after WWII
4th Level	During war/armed standoff	No-man's land type refuge	North & South Korea

confidence building measures could include creating TFCAS. German/ Belgian, Dutch and Luxembourg - aftermath of war to preserve peace.

- **4th Level:** Border parks can help countries maintain an "unhabitated" buffer zone.... The concept of an international network of border parks as "zones of peace" is one of great potential." (Thorsell, et al 1990) e.g. s of Turkey and Greece - park along Evros River boundary helping to protect the Lake Gala wetland site. North and South Korea - DMZ is a de facto wildlife refuge.

CASE STUDY: MOZAMBIQUE, SOUTH AFRICA & ZIMBABWE

GEF proposed TFCA pilot projects for Mozambique and neighbors:

1. **Maputo TFCA:** SE part of Maputo province. Combines Maputo Elephant Reserve in Mozambique to the Tenibe Elephant Park and Nduma Game Reserve in KwaZula, South Africa creating the Futi Corridor on both sides of the Futi River.
- *Benefits:* This area is recognized as an International Center of Plant Diversity by IUCN. A large number of endemic species - Swazi ordeal tree, Neergard's Sunbird and sub-species of red duiker. The Futi Corridor was once a traditional movement route for a population of elephants that is now divided by a fence. This TFCA will relieve elephant pressure on vegetation. Refugees returning after war into Mozambique are resettling causing strain, planning would help alleviate land pressure and create economic opportunities.

2. **Gaza TFCA:** Would combine the Gaza system in Mozambique to the Gona Rhe Zhou in Zimbabwe and Kruger National Park in South Africa.
- *Benefits:* Due to tse-tse eradication program large populations of wildlife were slaughtered. This was followed by civil war in Mozambique which significantly reduced wildlife populations. However, the habitat in Mozambique is still intact. The Gaza ecosystem in Mozambique was and could be inhabited by giraffe, ostrich, impala, buffalo, elephant, eland, wildebeest, lions, etc. These will be restocked by migrations of these species from Kruger and Gona Rhe Zhou. Game hunting, large natural resource base that can be sustainably exploited.

3. **Chimanimani TFCA:** Unique Afro-

montane system would unite the Mozambican and Zimbabwean areas. Large bio-diversity consisting of endemic species.

• *Benefits:* Return of community land rights and protection of traditional way of life and would allow community to control economic decisions.

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KEY REFERENCES

- ThorselL Jim (editor), "Parks on the Borderline: Experience in Transfrontier Conservation," IUCN, Gland, Switzerland, 1990.
- Global Environment Facility (GEF), "Mozambique: Transfrontier Conservation Areas Pilot and Institutional Strengthening Project," Project Document, December 1996, Tbe World Bank, Washington, DC.
- Machlis, Gary; Tichnell David, "Tbe State of the World's Parks: An International assessment for Resource Management, Policy and Research," Westview Press, Inc., Boulder, Co, 1985.
- CIA World Fact Book," CIA 1996 (Botswana, Mozambique, Namibia, South Africa, Zimbabwe)
- Munro, Neil (editor), "Protected Areas in Our Modern World: proceedings of a workshop held as part of the IUCN World Conservation Congress," Minister of Public Works & Govemmnt Services, Canada, 1997.
- Barzetti, Valerie (editor), "Parks and Progress: Protected Areas & Economic Development in Latin America & the Caribbean," IUCN, Washington, DC, 1993.
- MacPherson, Nancy, "Africa Regional Workshop on Strategies for Sustainability: Report," IUCN, Gland, Switzerland, 1995.
- "Move to Investigate Viability of Tram-Frontier Conservation Scheme," The Star South Africa, December 9, 1996.
- Carnie, Tony, "World Bank's Conservation Plan: Proposal Could Rescue Run-down Wildlife Areas," Mercury, South Africa, 1997 (Bushcraft Mag-e-zine Archive News Article-Web Page)
- "World Bank Plan for WikUffe in Mozambique," Pretoria News, South Africa, September 26, 1996.
- Yeld, John, "Peace Parks to Straddle SA Borders," Cape Argus, South Africa, April 7, 1997.
- Deacon, Robert T., Murpkv, Paul. "The Structure of an Environmental Transaction: Debt-for-Nature Swap," Land Economics, vol. 73 (1), February 1997.
- Gowdy, John M., "Tbe Value of Biodiversity: Markets, Society, and Ecosystems," Land Economics, vol. 73 (1), February, 1997.
- Boyer, David, "The Role of Northern NGOs in the Promotion of Sustainable Development in Africa," Center of African Studies, Edinburgh Universitv, 1990.
- Westing, Arthur H., "Core Values for Sustainable Development" Environmental Conservation, Vol. 23 (3).
- Thorsell, James, "Through Hot and Cold Wars, Parks Endure," Natural History June 1990.
- Richards, Michael, "Protected Areas, People and Incentives in the Search for Sustainable Forest Conservation in Honduras," Environmental Conservation, vol. 23 (3).
- Superparks The Impossible Dream?" Getaway, November 1996.
- de Villiers, Noel N., "Africatourism or Ecotourism?" African Wildlife. vol. 50 (3).
- Personal correspondence with IUCN. Open Africa Initiative and individuals involved in TFCAs.

"Wanted: Large Lots with View"

Conservation of Blue Ridge Parkway in Watauga County

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"There is nothing so American as our national parks...the fundamental idea behind the parks, is that the country belongs to the people" - Franklin D. Roosevelt

INTRODUCTION

Private property along the western North Carolina section of the Blue Ridge Parkway is quickly being developed in a manner inconsistent with the original plan for a rural scenic byway. In response to this threat, the Watauga committee of the Preservers of the Parkway, with assistance from the Conservation Trust for North Carolina, began a campaign to acquire land and conservation easements in significant areas of the Watauga County section of the Parkway.

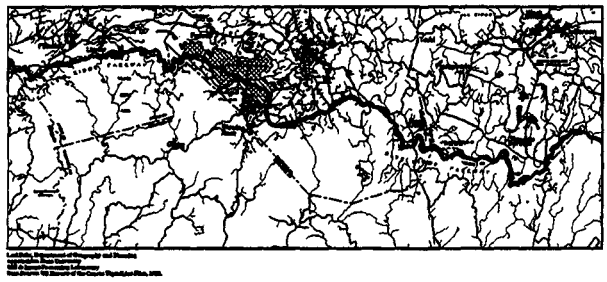
ENCROACHING DEVELOPMENT PROBLEMS

Stretching 470 miles between Virginia and North Carolina, the Blue Ridge Parkway links the two national parks of the southern Appalachians, Shenandoah National Park in Virginia and Great Smoky Mountains National Park in North Carolina and Tennessee (Figure 1). Construction began in 1935, and the Linn Cove viaduct section near Grandfather Mountain was completed in 1987. The Parkway scales past two urbanized areas: Roanoke, Virginia, with a population of about 250,000, and Asheville, North Carolina, with a population of about 100,000 (Fordney, 1994).

Among the multiple reasons for the construction of the Parkway was to allow visitors to see and experience rural scenes. Much of this purpose has been accomplished due to preserved farms, log cabins, and split rail fences. Another goal of the Parkway construction was to provide the visitor with the sense of a park without borders (Fordney, 1994). However, those borders along the Parkway are quickly narrowing, due to increasing urban sprawl and air and water pollution. The Parkway's scenic and natural resources have begun to attract more retirees, second home owners, vacationers and developers. An additional threat to views along the Blue Ridge Parkway is that only five of the 29 municipalities along the Parkway actually have adopted zoning regulations to restrict density and types of land uses (Rotegard, 1997). However, land use regulations alone are limited as a mechanism to control and stop development along bordering private land. Often, local land use plans may permit high development densities and allow inappropriate land uses. For example, in 1992, a Roanoke property owner was able to gain approval for a rezoning from agricultural to residential zoning for hundreds of acres bordering the Parkway.

Parkway officials and advocates are worried that creeping suburbia could potentially spoil the Parkway's grandeur, turning it into an rural freeway (Horan, 1993). The areas surrounding Asheville, North Carolina and Roanoke, Virginia, and the stretch north of Grandfather Mountain through the Boone-Blowing Rock region in North Carolina, are the sections that most concern Parkway planners. These areas

Figure 1. Blue Ridge Parkway (Pineola, NC to Jefferson, NC)



in western North Carolina have been experiencing the highest rates of growth (Rives, 1993)

CONSERVATION OPTIONS

The simplest solution to the problem of encroaching development would seem to be for the federal government to purchase more land as a buffer zone along the Parkway. However, the National Park Service does not have the fiscal means to finance outright purchase of these hundreds of miles of private land. The Parkway has limited funds to buy some land each year, but only on a case-by-case basis. Although the Park Service has the ability to condemn land, they prefer not to for fear of incurring the ire of the property owners. However, as economic, demographic and social changes encourage development sprawl, growth pressures along the scenic land bordering the Parkway will likely increase.

The federal government is researching ways to more efficiently manage and protect National Parks. In April 1996, President Clinton recognized in a memorandum to the Secretary of the Interior that public-private partnerships to enhance park protection and maintenance should be encouraged. Therefore, an emerging potential solution to preserving views and scenic resources along the Blue Ridge Parkway lies in partnerships between the federal government and non-profit conservation organizations to explore different conservation strategies. This partnering trend is illustrated by the recent alliance of four private land conservancies, the National Committee for the New River, the Southern Appalachian Highlands Conservancy, the Western Virginia Land Trust and the Conservation Trust for North Carolina, to work together with private landowners and the National Park Service to protect the Parkway (Thompson, 1997)

Non-profit conservation groups have many different preservation tools. The best choice among those tools will depend on the goals of the property owner and the conservation organization. Voluntary techniques to protect private property may include: nonbinding agreement programs, leases, mutual covenants, tax incentives, acquisition of conservation easements, rights of first refusal, options, deed restrictions, purchase of development rights, and outright acquisitions of property (Stokes et al., 1989). In North Carolina, the conservation easement is quickly emerging as a popular method for protecting and conserving land. The Parkway preservation movement in the Watauga County area has focused on the acquisition of conservation easements and outright purchases of land from willing sellers.

CONSERVATION EASEMENTS

A conservation or preservation easement is an agreement between a property owner and the easement holder about the treatment of the property by current and future land owners. By allowing the owner to still

own and use the land, this method ensures continued protection, because the easement "runs with the land," usually in perpetuity. These easements can be either donated or sold, although typically non-profit organizations seek donations of land, while governmental agencies may purchase the easements (Stokes et al., 1989).

Conservation easements tend to work best in situations where the landowner is concerned about preserving the land, the land does not need intensive management, the owner is interested in obtaining tax deductions or estate reductions, and the current and planned land uses by the owner are compatible with the saving of natural features (Conservation Trust for North Carolina). In addition, the permanent protection guaranteed by the easement may increase the value of the remainder of the property.

The advantages for having a non-profit conservation group rather than a local government acquire land and easements are numerous. Conservation groups can work for the public well-being without obtaining official public approval, and have the ability to move quickly with less bureaucracy, especially with obtaining donations from property owners.

HIGH COUNTRY PRESERVATION ACTIVITIES

In Watauga County, an alliance to preserve significant views along the Parkway has been led by the Watauga committee of the Preservers of the Parkway and the Conservation Trust for North Carolina. In 1997, this group purchased one property outright and received a donation of a conservation easement on another property. The Watauga committee joined with the Conservation Trust for North Carolina, the local League of Women Voters, the Blue Ridge Resource Conservation and Development Council, and the Avery-Watauga Association of Realtors to sponsor two educational seminars on conservation easements this past summer. This partnership is also exploring the creation of a new land trust, or a partnership with an existing regional land trust, to specifically address conservation needs both along this stretch of the Parkway and in the High Country region as well.

The Preservers of the Blue Ridge Parkway campaign was created as a temporary initiative to raise funds to preserve views and land in western North Carolina bordering the Blue Ridge Parkway. Founded in 1996, the "Preservers of the Parkway" was established as a direct result of the work of the Year of the Mountain Commission, which was chaired by Hugh Morton, Sr. The Year of the Mountain Commission was appointed by the governor to examine opportunities for conservation and progress in the mountains of North Carolina. The Preservers program is overseen by the Conservation Trust, and in less than a year, the program has raised over $250,000, purchased 70 acres, and acquired conservation easements on 17,234 acres along the Parkway. Although other committees in western North Carolina have been established, the Watauga committee has accomplished much this past year and has embarked on an aggressive education campaign, with assistance from several local partners. According to Margaret Haydon, chair of the Watauga Committee of the Preservers, the goal for the committee was to begin the fundraising efforts and preservation activities, and then blend those initiatives into a new or an existing land trust foundation.

The Watauga committee of the Preservers of the Parkway is composed

of various community members, with representation from the real estate sector, private businesses, resort owners and the local electric cooperative. The Conservation Trust for North Carolina accepts the conservation easements, and assists in obtaining appraisals, options and deeds. The Conservation Trust is dedicated to enriching and preserving North Carolina's natural and cultural heritage through advisory and technical assistance to communities and landowners. Acting as a statewide network of regional and local land trusts, the Conservation Trust is a key player in the protection of lands for their natural, scenic, recreational, historic, or agricultural resources.

GRANDVIEW OVERLOOK AND THE CRITCHER FARM

To date, the local committee of the Preservers has worked with the Conservation Trust for North Carolina and acquired one conservation easement donation at the Grandview Overlook and has purchased the Critcher Farm, near Bamboo Gap (Figure 2).

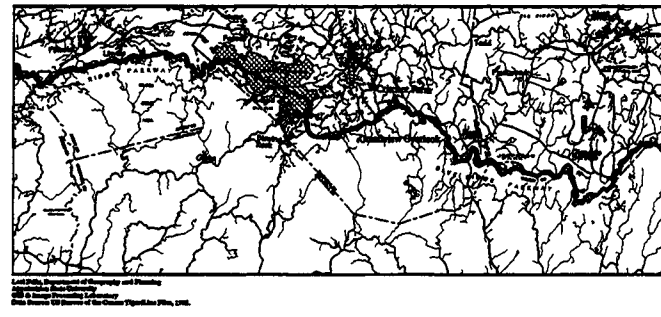
The conservation easement donation at Grandview Overlook includes over 234 acres and most of the forested slopes below the overlook on the east side of the Parkway. This majestic overlook is located just south of the Parkway School. The local property owner gave up all future timbering rights on the property and retains only the rights to construct two homesites in locations not visible from the Parkway. According to Chuck Roe, director of the Conservation Trust for North Carolina, this donation permanently protects one of the most beautiful vistas of forests and mountain slopes and will become a role model for other private land owners.

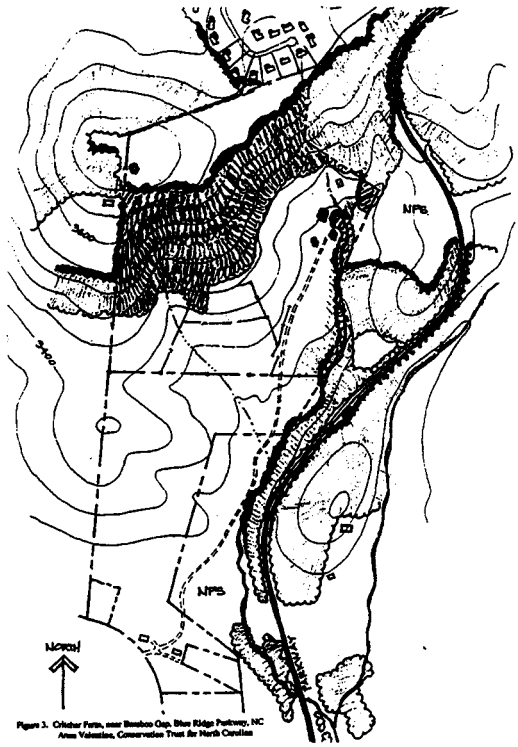
Completed in September 1997, the recent purchase of the Critcher Farm at a fair market value was another coup for the Preservers and the Conservation Trust. The site includes 47 acres and is located on the west side of the Parkway, just east of the Daniel Boone Trace (Figure 3). The parcel includes a farmhouse and barn, with a scenic mountain stream. This preserved land will serve as a good example of the agricultural past along the Parkway.

EDUCATIONAL PROGRAM FOR CONSERVATION

The Preservers and their local partners are aware that the initial step for conservation needs to be the education of communities to realize the significance of the Parkway as an economic resource. It is also necessary to communicate that uncontrolled development can easily destroy the features of the Parkway which make it attractive. Therefore, much of the early efforts of the Preservers and their partner organizations have focused on

Figure 2. Conservation Acquisitions in Watauga Co., NC Along the Blue Ridge Parkway





educating the public about the potential threats of development and offering alternatives to developing their land.

Education remains crucial to the success of a conservation organization, not only to communicate the significance of conserving certain resources, but to encourage donations of money and property. The local Preservers group has made excellent use of the news media, issuing several news releases about their activities in the two local newspapers. By sponsoring a contest among Watauga County schools for art, academic projects and fundraising related to the Parkway, the group has focused public attention on their campaign. Another effective step has been to explore potential partnerships with other organizations, such as the League of Women Voters and the Blue Ridge Conservation and Development Council.

The Watauga committee and the Conservation Trust have plans to target educational programs to local estate planners, attorneys, and accountants, because of their ability to influence property owners in estate planning and financial planning for tax reductions. Because conservation easements and these flexible, voluntary methods of conserving land are relatively new to practitioners in these fields, two workshops for property owners have been sponsored by the Watauga Committee of the Preservers, the Watauga County League of Women Voters, the Conservation Trust for North Carolina, the Blue Ridge Resource Conservation and Development Council and the Avery-Watauga Association of Realtors. These educational workshops on conservation easements were held in June and August of 1997. Approximately 50 participants attended the two meetings, including legal professionals, financial planners and private property owners.

Through finding common ground among the above groups, the Watauga County partnership for Parkway conservation seems to be creating an excellent foundation to preserve Parkway lands. For example, Chuck Roe, executive director with the Conservation Trust for North Carolina, was invited to speak at the April meeting of the League of Women's Voters, a meeting which brought together members of several local preservation and conservation groups. This event also functioned as a recognition ceremony for local land owners who have donated conservation easements along the Parkway.

CONCLUSION

Support for and interest in conservation of private lands along the Watauga County section of the Blue

Ridge Parkway seems to be growing among local residents. Partnerships between civic groups and environmental groups with shared interests and the fundraising efforts of the Watauga committee of the Preservers of the Parkway are accomplishing much toward the future preservation of private land along the Watauga County section of the Parkway. The creation of a new land trust, or the partnership with an existing regional land trust with Parkway preservation as a priority, is necessary to continue this significant work. Lands with a view along the Parkway are "wanted" for conservation by this Watauga County partnership and the Conservation Trust for North Carolina.

REFERENCES

Conservation Trust for North Carolina. " Conservation Easements: An Introduction for North Carolina Landowners." Produced by the North Carolina Coastal Land Trust and the World Wildlife Fund.

Fordney, Chris. "Blue Ridge Blues." *National Parks* 68 (1994): 26-31.

Haydon, Margaret. Chair, Watauga Committee of the Preservers of the Parkway, Blowing Rock, NC. Interview, June 1997.

Horan, Jack. "Blue Ridge Blues." *The Charlotte Observer*, 3 October 1993, pp. 1E,2E.

Rives, Julie Powers. "Vanishing Vistas: Development Threatening Picturesque Parkway View." *The News and Observer*, Raleigh, North Carolina, 24 January 1993, pp.1A, 12A.

Rotegard, Laura. Community Planner, National Park Service, Asheville, NC. Interview, August 1997.

Stokes, Samuel N., A. Elizabeth Watson, Genevieve P. Keller, and J. Timothy Keller. *Saving America's Countryside: A Guide to Rural Conservation.* Baltimore, MD: Johns Hopkins University Press, pp. 173-203, 1989.

Thompson, Jim. "Sterling Carroll Donates Scenic Easement to Protect Grandview." *The Mountain Times*, Boone, North Carolina, 8 May 1997, pp.1, 20, 21.